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MONTHLY BULLETIN

OF THE

Mass STATE BOARD OF HEALTH

OF

MASSACHUSETTS.

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STATE BOARD OF HEALTH.

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Approved by
The State Board of Publication.

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RETURNS OF DISEASES.

Cases of Diseases declared by the State Board of Health to be Dangerous to the Public Health.

[Under the provisions of section 52 of chapter 75 of the Revised Laws.]

DISEASE.	Week ending —					
	Jan. 3.	Jan. 10.	Jan. 17.	Jan. 24.	Jan. 31.	Total.
Diphtheria,	180	178	148	183	157	846
Measles,	131	203	169	188	189	880
Scarlet fever,	312	309	324	304	335	1,584
Typhoid fever,	19	35	29	71	40	194
Tuberculosis, pulmonary (or not classified),	186	154	123	153	143	759
Tuberculous meningitis,	5	4	3	4	3	19
Tuberculosis, other forms,	5	4	3	9	4	25
Cerebro-spinal meningitis,	1	1	1	5	3	11
Whooping cough,	77	109	66	91	90	433
Varicella,	116	147	144	153	146	706
Ophthalmia neonatorum,	31	50	56	26	62	225
Anterior poliomyelitis,	2	6	3	–	3	14
Smallpox,	1	–	–	–	1	2
Trachoma,	3	6	–	–	3	12
Tetanus,	–	–	3	–	–	3
Malignant pustule,	1	–	–	–	–	1
Leprosy,	–	–	–	–	1	1
Actinomycosis,	1	–	–	–	–	1

Cases of Infectious Diseases not included in the Above Table.

[Cases not notifiable under the provisions of section 52 of chapter 75 of the Revised Laws.]

DISEASE.	Week ending —					
	Jan. 3.	Jan. 10.	Jan. 17.	Jan. 24.	Jan. 31.	Total.
Mumps,	8	12	14	6	12	52
Erysipelas,	–	2	–	–	–	2
Anthrax,	1	–	–	–	–	1
Influenza,	–	–	1	–	–	1
Impetigo,	–	1	–	–	–	1
Lupus,	1	–	–	–	–	1

RETURNS OF DEATHS.

Deaths from Diseases declared by the State Board of Health to be Dangerous to the Public Health in Cities and Towns of More than 10,000 Population.

[Under the provisions of chapter 210, Acts of 1913.]

Week ending Jan. 3, 1914.

CITIES AND TOWNS.	Population. Census for 1910.	Total Number reported.	Tuberculosis, Pulmonary (or not classified).	Tuberculous Meningitis.	Tuberculosis, Other Forms.	Diphtheria.	Typhoid Fever.	Scarlet Fever.	Measles.	Whooping Cough.	Cerebro-spinal Meningitis.
Boston,	686,092	31[1] 38[3]	25[1] 29[2]	– –	– 1[2]	3[1] 4[2]	– –	1[1] 1[2]	– –	– –	2[1] 2[2]
Worcester,	145,986	8	3	–	–	1	–	2	1	1	–
Fall River,	119,295	10[4]	6	–	–	1	–	2	–	–	–
Lowell,	106,294	4	1	–	2	1	–	–	–	–	–
Cambridge,	104,839	6	6	–	–	–	–	–	–	–	–
New Bedford,	96,652	2	2	–	–	–	–	–	–	–	–
Lynn,	89,336	–	–	–	–	–	–	–	–	–	–
Springfield,	88,926	1	1	–	–	–	–	–	–	–	–
Lawrence,	85,892	–	–	–	–	–	–	–	–	–	–
Somerville,	77,236	1	1	–	–	–	–	–	–	–	–
Holyoke,	57,730	3	2	–	–	–	–	–	–	–	1
Brockton,	56,878	1	1	–	–	–	–	–	–	–	–
Malden,	44,404	1	–	–	–	1	–	–	–	–	–
Haverhill,	44,115	4	2	–	–	1	–	–	–	1	–
Salem,	43,697	–	–	–	–	–	–	–	–	–	–
Newton,	39,806	2	1	–	–	–	–	–	1	–	–
Fitchburg,	37,826	1	–	–	–	1	–	–	–	–	–
Taunton,	34,259	–	–	–	–	–	–	–	–	–	–
Everett,	33,484	–	–	–	–	–	–	–	–	–	–
Quincy,	32,642	–	–	–	–	–	–	–	–	–	–
Chelsea,	32,452	1	1	–	–	–	–	–	–	–	–
Pittsfield,	32,121	–	–	–	–	–	–	–	–	–	–
Waltham,	27,834	–	–	–	–	–	–	–	–	–	–
Brookline,	27,792	1	1	–	–	–	–	–	–	–	–
Chicopee,	25,401	–	–	–	–	–	–	–	–	–	–
Gloucester,	24,398	–	–	–	–	–	–	–	–	–	–
Medford,	23,150	–	–	–	–	–	–	–	–	–	–
North Adams,	22,019	–	–	–	–	–	–	–	–	–	–
Northampton,	19,431	–	–	–	–	–	–	–	–	–	–
Beverly,	18,650	1	–	–	–	–	–	–	–	1	–
Revere,	18,219	–	–	–	–	–	–	–	–	–	–
Leominster,	17,580	1	–	–	–	1	–	–	–	–	–
Attleborough,	16,215	–	–	–	–	–	–	–	–	–	–
Westfield,	16,044	1[1] 2[2]	1[1] 2[2]	– –	– –	– –	– –	– –	– –	– –	– –
Peabody,	15,721	–	–	–	–	–	–	–	–	–	–
Melrose,	15,715	–	–	–	–	–	–	–	–	–	–
Woburn,	15,308	–	–	–	–	–	–	–	–	–	–
Newburyport,	14,949	–	–	–	–	–	–	–	–	–	–
Gardner,	14,699	2	–	–	1	1	–	–	–	–	–
Marlborough,	14,579	–	–	–	–	–	–	–	–	–	–
Clinton,	13,075	–	–	–	–	–	–	–	–	–	–
Milford,	13,055	–	–	–	–	–	–	–	–	–	–
Adams,	13,026	–	–	–	–	–	–	–	–	–	–
Framingham,	12,948	2	1	–	–	1	–	–	–	–	–
Weymouth,	12,895	–	–	–	–	–	–	–	–	–	–
Watertown,	12,875	–	–	–	–	–	–	–	–	–	–
Southbridge,	12,592	–	–	–	–	–	–	–	–	–	–
Plymouth,	12,141	–	–	–	–	–	–	–	–	–	–
Webster,	11,509	–	–	–	–	–	–	–	–	–	–
Methuen,	11,448	–	–	–	–	–	–	–	–	–	–
Wakefield,	11,404	–	–	–	–	–	–	–	–	–	–
Arlington,	11,187	2	1	–	1	–	–	–	–	–	–
Greenfield,	10,427	–	–	–	–	–	–	–	–	–	–
Winthrop,	10,132	–	–	–	–	–	–	–	–	–	–
Total of reporting towns,	1,857,431	94	61	–	5	13	–	5	2	3	3

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[1] Nonresidents deducted.

[2] Total deaths.

[3] Total deaths: one death from tetanus.

[4] One death from anterior poliomyelitis.

Week ending Jan. 10, 1914.

CITIES AND TOWNS.	Population. Census for 1910.	Total Number reported.	Tuberculosis, Pulmonary (or not classified).	Tuberculous Meningitis.	Tuberculosis, Other Forms.	Diphtheria.	Typhoid Fever.	Scarlet Fever.	Measles.	Whooping Cough.	Cerebro-spinal Meningitis.
Boston, ...	686,092	28[1] 32[2]	18[1] 20[2]	2[1] 3[2]	– –	3[1] 3[2]	1[1] 2[2]	3[1] 3[2]	– –	– –	1[1] 1[2]
Worcester, ...	145,986	8	4	2	–	1	–	–	1	–	–
Fall River, ...	119,295	2	2	–	–	–	–	–	–	–	–
Lowell, ...	106,294	7	5	–	–	1	1	–	–	–	–
Cambridge, ...	104,839	8	7	–	–	–	–	–	1	–	–
New Bedford, ...	96,652	5	2	2	–	1	–	–	–	–	–
Lynn, ...	89,336	1	1	–	–	–	–	–	–	–	–
Springfield, ...	88,926	1	–	–	1	–	–	–	–	–	–
Lawrence, ...	85,892	2	2	–	–	–	–	–	–	–	–
Somerville, ...	77,236	2	2	–	–	–	–	–	–	–	–
Holyoke, ...	57,730	1	1	–	–	–	–	–	–	–	–
Brockton, ...	56,878	1	–	–	–	–	–	–	–	1	–
Malden, ...	44,404	–	–	–	–	–	–	–	–	–	–
Haverhill, ...	44,115	3	1	–	–	–	–	1	–	1	–
Salem, ...	43,697	–	–	–	–	–	–	–	–	–	–
Newton, ...	39,806	–	–	–	–	–	–	–	–	–	–
Fitchburg, ...	37,826	–	–	–	–	–	–	–	–	–	–
Taunton, ...	34,259	3	–	–	–	–	–	1	–	2	–
Everett, ...	33,484	–	–	–	–	–	–	–	–	–	–
Quincy, ...	32,642	–	–	–	–	–	–	–	–	–	–
Chelsea, ...	32,452	3	2	–	–	–	–	–	–	–	1
Pittsfield, ...	32,121	1	1	–	–	–	–	–	–	–	–
Waltham, ...	27,834	–	–	–	–	–	–	–	–	–	–
Brookline, ...	27,792	–	–	–	–	–	–	–	–	–	–
Chicopee, ...	25,401	3	2	–	–	1	–	–	–	–	–
Gloucester, ...	24,398	–	–	–	–	–	–	–	–	–	–
Medford, ...	23,150	2	1	–	–	1	–	–	–	–	–
North Adams, ...	22,019	–	–	–	–	–	–	–	–	–	–
Northampton, ...	19,431	–	–	–	–	–	–	–	–	–	–
Beverly, ...	18,650	–	–	–	–	–	–	–	–	–	–
Revere, ...	18,219	–	–	–	–	–	–	–	–	–	–
Leominster, ...	17,580	–	–	–	–	–	–	–	–	–	–
Attleborough, ...	16,215	–	–	–	–	–	–	–	–	–	–
Westfield, ...	16,044	– 1[2]	– 1[2]	– –	– –	– –	– –	– –	– –	– –	– –
Peabody, ...	15,721	–	–	–	–	–	–	–	–	–	–
Melrose, ...	15,715	–	–	–	–	–	–	–	–	–	–
Woburn, ...	15,308	–	–	–	–	–	–	–	–	–	–
Newburyport, ...	14,949	1[3]	–	–	–	–	–	–	–	–	–
Gardner, ...	14,699	1	–	–	1	–	–	–	–	–	–
Marlborough, ...	14,579	–	–	–	–	–	–	–	–	–	–
Clinton, ...	13,075	–	–	–	–	–	–	–	–	–	–
Milford, ...	13,055	–	–	–	–	–	–	–	–	–	–
Adams, ...	13,026	–	–	–	–	–	–	–	–	–	–
Framingham, ...	12,948	–	–	–	–	–	–	–	–	–	–
Weymouth, ...	12,895	–	–	–	–	–	–	–	–	–	–
Watertown, ...	12,875	–	–	–	–	–	–	–	–	–	–
Southbridge, ...	12,592	–	–	–	–	–	–	–	–	–	–
Plymouth, ...	12,141	–	–	–	–	–	–	–	–	–	–
Webster, ...	11,509	–	–	–	–	–	–	–	–	–	–
Methuen, ...	11,448	–	–	–	–	–	–	–	–	–	–
Wakefield, ...	11,404	–	–	–	–	–	–	–	–	–	–
Arlington, ...	11,187	–	–	–	–	–	–	–	–	–	–
Greenfield, ...	10,427	–	–	–	–	–	–	–	–	–	–
Winthrop, ...	10,132	–	–	–	–	–	–	–	–	–	–
Total of reporting towns, . .	1,952,346	88	54	7	2	8	3	5	2	4	2

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[1] Nonresidents deducted. [2] Total deaths. [3] One death from anterior poliomyelitis.

Week ending Jan. 17, 1914.

CITIES AND TOWNS.	Population. Census for 1910.	Total Number reported.	Tuberculosis, Pulmonary (or not classified).	Tuberculous Meningitis.	Tuberculosis, Other Forms.	Diphtheria.	Typhoid Fever.	Scarlet Fever.	Measles.	Whooping Cough.	Cerebro-spinal Meningitis.
Boston,	686,092	33[1] 36[2]	22[1] 22[2]	1[1] 2[2]	1[1] 2[2]	2[1] 2[2]	2[1] 3[2]	3[1] 3[2]	– –	2[1] 2[2]	– –
Worcester,	145,986	7	5	–	–	2	–	–	–	–	–
Fall River,	119,295	10	8	–	–	2	–	–	–	–	–
Lowell,	106,294	6	2	–	1	3	–	–	–	–	–
Cambridge,	104,839	4	3	1	–	–	–	–	–	–	–
New Bedford,	96,652	8	3	–	–	2	–	3	–	–	–
Lynn,	89,336	1	–	–	–	1	–	–	–	–	–
Springfield,	88,926	3	2	–	1	–	–	–	–	–	–
Lawrence,	85,892	8	3	1	–	4	–	–	–	–	–
Somerville,	77,236	2	2	–	–	–	–	–	–	–	–
Holyoke,	57,730	1	1	–	–	–	–	–	–	–	–
Brockton,	56,878	–	–	–	–	–	–	–	–	–	–
Malden,	44,404	3	1	–	–	1	–	–	–	–	1
Haverhill,	44,115	1	–	–	–	–	1	–	–	–	–
Salem,	43,697	–	–	–	–	–	–	–	–	–	–
Newton,	39,806	1	–	1	–	–	–	–	–	–	–
Fitchburg,	37,826	–	–	–	–	–	–	–	–	–	–
Taunton,	34,259	1	1	–	–	–	–	–	–	–	–
Everett,	33,484	2	2	–	–	–	–	–	–	–	–
Quincy,	32,642	–	–	–	–	–	–	–	–	–	–
Chelsea,	32,452	2	–	–	1	–	–	–	–	1	–
Pittsfield,	32,121	1	–	–	–	1	–	–	–	–	–
Waltham,	27,834	–	–	–	–	–	–	–	–	–	–
Brookline,	27,792	2	2	–	–	–	–	–	–	–	–
Chicopee,	25,401	2	2	–	–	–	–	–	–	–	–
Gloucester,	24,398	–	–	–	–	–	–	–	–	–	–
Medford,	23,150	1	–	–	1	–	–	–	–	–	–
North Adams,	22,019	–	–	–	–	–	–	–	–	–	–
Northampton,	19,431	–	–	–	–	–	–	–	–	–	–
Beverly,	18,650	–	–	–	–	–	–	–	–	–	–
Revere,	18,219	–	–	–	–	–	–	–	–	–	–
Leominster,	17,580	–	–	–	–	–	–	–	–	–	–
Attleborough,	16,215	–	–	–	–	–	–	–	–	–	–
Westfield,	16,044	1[1] 3[2]	1[1] 1[2]	– –	– –	– 1[2]	– –	– –	– 1[2]	– –	– –
Peabody,	15,721	–	–	–	–	–	–	–	–	–	–
Melrose,	15,715	1	1	–	–	–	–	–	–	–	–
Woburn,	15,308	–	–	–	–	–	–	–	–	–	–
Newburyport,	14,949	–	–	–	–	–	–	–	–	–	–
Gardner,	14,699	–	–	–	–	–	–	–	–	–	–
Marlborough,	14,579	–	–	–	–	–	–	–	–	–	–
Clinton,	13,075	–	–	–	–	–	–	–	–	–	–
Milford,	13,055	–	–	–	–	–	–	–	–	–	–
Adams,	13,026	–	–	–	–	–	–	–	–	–	–
Framingham,	12,948	1	–	1	–	–	–	–	–	–	–
Weymouth,	12,895	–	–	–	–	–	–	–	–	–	–
Watertown,	12,875	–	–	–	–	–	–	–	–	–	–
Southbridge,	12,592	–	–	–	–	–	–	–	–	–	–
Plymouth,	12,141	–	–	–	–	–	–	–	–	–	–
Webster,	11,509	–	–	–	–	–	–	–	–	–	–
Methuen,	11,448	–	–	–	–	–	–	–	–	–	–
Wakefield,	11,404	–	–	–	–	–	–	–	–	–	–
Arlington,	11,187	–	–	–	–	–	–	–	–	–	–
Greenfield,	10,427	–	–	–	–	–	–	–	–	–	–
Winthrop,	10,132	–	–	–	–	–	–	–	–	–	–
Total of reporting towns,	2,039,969	107	61	6	6	19	4	6	1	3	1

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[1] Nonresidents deducted.

[2] Total deaths.

Week ending Jan. 24, 1914.

CITIES AND TOWNS.	Population. Census for 1910.	Total Number reported.	Tuberculosis, Pulmonary (or not classified).	Tuberculous Meningitis.	Tuberculosis, Other Forms.	Diphtheria.	Typhoid Fever.	Scarlet Fever.	Measles.	Whooping Cough.	Cerebro-spinal Meningitis.
Boston,	686,092	32[1] 35[2]	20[1] 20[2]	1[1] 2[2]	3[1] 3[2]	3[1] 4[2]	2[1] 2[2]	- 1[2]	1[1] 1[2]	- -	2[1] 2[2]
Worcester,	145,986	5	3	1	-	-	1	-	-	-	-
Fall River,	119,295	2	2	-	-	-	-	-	-	-	-
Lowell,	106,294	5	3	1	-	1	-	-	-	-	-
Cambridge,	104,839	4	2	1	-	-	-	-	-	1	-
New Bedford,	96,652	5	4	-	1	-	-	-	-	-	-
Lynn,	89,336	3	2	-	1	-	-	-	-	-	-
Springfield,	88,926	1	1	-	-	-	-	-	-	-	-
Lawrence,	85,892	3	2	1	-	-	-	-	-	-	-
Somerville,	77,236	3	2	-	-	1	-	-	-	-	-
Holyoke,	57,730	2	2	-	-	-	-	-	-	-	-
Brockton,	56,878	4	4	-	-	-	-	-	-	-	-
Malden,	44,404	4	3	-	-	1	-	-	-	-	-
Haverhill,	44,115	3	1	-	-	-	1	1	-	-	-
Salem,	43,697	-	-	-	-	-	-	-	-	-	-
Newton,	39,806	1	-	-	-	1	-	-	-	-	-
Fitchburg,	37,826	-	-	-	-	-	-	-	-	-	-
Taunton,	34,259	3	-	-	1	-	-	2	-	-	-
Everett,	33,484	1	1	-	-	-	-	-	-	-	-
Quincy,	32,642	-	-	-	-	-	-	-	-	-	-
Chelsea,	32,452	-	-	-	-	-	-	-	-	-	-
Pittsfield,	32,121	-	-	-	-	-	-	-	-	-	-
Waltham,	27,834	-	-	-	-	-	-	-	-	-	-
Brookline,	27,792	1	1	-	-	-	-	-	-	-	-
Chicopee,	25,401	1	-	-	1	-	-	-	-	-	-
Gloucester,	24,398	-	-	-	-	-	-	-	-	-	-
Medford,	23,150	-	-	-	-	-	-	-	-	-	-
North Adams,	22,019	-	-	-	-	-	-	-	-	-	-
Northampton,	19,431	-	-	-	-	-	-	-	-	-	-
Beverly,	18,650	1	-	1	-	-	-	-	-	-	-
Revere,	18,219	-	-	-	-	-	-	-	-	-	-
Leominster,	17,580	1	-	-	-	1	-	-	-	-	-
Attleborough,	16,215	-	-	-	-	-	-	-	-	-	-
Westfield,	16,044	1	-	-	1	-	-	-	-	-	-
Peabody,	15,721	-	-	-	-	-	-	-	-	-	-
Melrose,	15,715	-	-	-	-	-	-	-	-	-	-
Woburn,	15,308	-	-	-	-	-	-	-	-	-	-
Newburyport,	14,949	-	-	-	-	-	-	-	-	-	-
Gardner,	14,699	1	-	-	-	1	-	-	-	-	-
Marlborough,	14,579	-	-	-	-	-	-	-	-	-	-
Clinton,	13,075	-	-	-	-	-	-	-	-	-	-
Milford,	13,055	-	-	-	-	-	-	-	-	-	-
Adams,	13,026	1	-	-	1	-	-	-	-	-	-
Framingham,	12,948	-	-	-	-	-	-	-	-	-	-
Weymouth,	12,895	-	-	-	-	-	-	-	-	-	-
Watertown,	12,875	-	-	-	-	-	-	-	-	-	-
Southbridge,	12,592	1	1	-	-	-	-	-	-	-	-
Plymouth,	12,141	-	-	-	-	-	-	-	-	-	-
Webster,	11,509	-	-	-	-	-	-	-	-	-	-
Methuen,	11,448	1	1	-	-	-	-	-	-	-	-
Wakefield,	11,404	1	-	1	-	-	-	-	-	-	-
Arlington,	11,187	1	1	-	-	-	-	-	-	-	-
Greenfield,	10,427	-	-	-	-	-	-	-	-	-	-
Winthrop,	10,132	-	-	-	-	-	-	-	-	-	-
Total of reporting towns,	2,091,047	95	56	8	9	10	4	4	1	1	2

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[1] Nonresidents deducted.

[2] Total deaths.

Week ending Jan. 31, 1914.

CITIES AND TOWNS.	Population. Census for 1910.	Total Number reported.	Tuberculosis, Pulmonary (or not classified).	Tuberculous Meningitis.	Tuberculosis, Other Forms.	Diphtheria.	Typhoid Fever.	Scarlet Fever.	Measles.	Whooping Cough.	Cerebro-spinal Meningitis.
Boston,	686,092	29[1] 32[2]	13[1] 15[2]	2[1] 2[2]	1[1] 1[2]	5[1] 6[2]	4[1] 4[2]	2[1] 2[2]	1[1] 1[2]	- -	1[1] 1[2]
Worcester,	145,986	5	4	-	-	1	-	-	-	-	-
Fall River,	119,295	9	5	-	-	3	-	-	-	1	-
Lowell,	106,294	3	3	-	-	-	-	-	-	-	-
Cambridge,	104,839	4	2	-	1	-	-	-	1	-	-
New Bedford,	96,652	3	2	1	-	-	-	-	-	-	-
Lynn,	89,336	1	1	-	-	-	-	-	-	-	-
Springfield,	88,926	4	4	-	-	-	-	-	-	-	-
Lawrence,	85,892	1	1	-	-	-	-	-	-	-	-
Somerville,	77,236	3	2	-	1	-	-	-	-	-	-
Holyoke,	57,730	3	2	-	-	-	-	1	-	-	-
Brockton,	56,878	2	1	-	-	-	-	-	-	1	-
Malden,	44,404	-	-	-	-	-	-	-	-	-	-
Haverhill,	44,115	1	1	-	-	-	-	-	-	-	-
Salem,	43,697	-	-	-	-	-	-	-	-	-	-
Newton,	39,806	3	1	-	-	2	-	-	-	-	-
Fitchburg,	37,826	1	1	-	-	-	-	-	-	-	-
Taunton,	34,259	3	1	-	-	-	-	-	-	2	-
Everett,	33,484	3[3]	-	-	-	1	-	-	1	-	-
Quincy,	32,642	1	1	-	-	-	-	-	-	-	-
Chelsea,	32,452	1	1	-	-	-	-	-	-	-	-
Pittsfield,	32,121	1	-	-	-	-	-	-	-	1	-
Waltham,	27,834	1	-	-	-	-	-	1	-	-	-
Brookline,	27,792	1	1	-	-	-	-	-	-	-	-
Chicopee,	25,401	2	1	-	-	1	-	-	-	-	-
Gloucester,	24,398	-	-	-	-	-	-	-	-	-	-
Medford,	23,150	-	-	-	-	-	-	-	-	-	-
North Adams,	22,019	-	-	-	-	-	-	-	-	-	-
Northampton,	19,431	-	-	-	-	-	-	-	-	-	-
Beverly,	18,650	-	-	-	-	-	-	-	-	-	-
Revere,	18,219	-	-	-	-	-	-	-	-	-	-
Leominster,	17,580	-	-	-	-	-	-	-	-	-	-
Attleborough,	16,215	1	-	-	-	-	-	1	-	-	-
Westfield,	16,044	3	2	-	-	-	-	1	-	-	-
Peabody,	15,721	1	1	-	-	-	-	-	-	-	-
Melrose,	15,715	-	-	-	-	-	-	-	-	-	-
Woburn,	15,308	-	-	-	-	-	-	-	-	-	-
Newburyport,	14,949	1	1	-	-	-	-	-	-	-	-
Gardner,	14,699	-	-	-	-	-	-	-	-	-	-
Marlborough,	14,579	-	-	-	-	-	-	-	-	-	-
Clinton,	13,075	2	2	-	-	-	-	-	-	-	-
Milford,	13,055	-	-	-	-	-	-	-	-	-	-
Adams,	13,026	-	-	-	-	-	-	-	-	-	-
Framingham,	12,948	-	-	-	-	-	-	-	-	-	-
Weymouth,	12,895	-	-	-	-	-	-	-	-	-	-
Watertown,	12,875	-	-	-	-	-	-	-	-	-	-
Southbridge,	12,592	1	1	-	-	-	-	-	-	-	-
Plymouth,	12,141	-	-	-	-	-	-	-	-	-	-
Webster,	11,509	-	-	-	-	-	-	-	-	-	-
Methuen,	11,448	-	-	-	-	-	-	-	-	-	-
Wakefield,	11,404	-	-	-	-	-	-	-	-	-	-
Arlington,	11,187	-	-	-	-	-	-	-	-	-	-
Greenfield,	10,427	-	-	-	-	-	-	-	-	-	-
Winthrop,	10,132	-	-	-	-	-	-	-	-	-	-
Total of reporting towns,	2,171,484	97	57	3	3	14	4	6	3	5	1

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[1] Nonresidents deducted.

[2] Total deaths.

[3] One death from chickenpox.

DEATHS FROM DISEASES DECLARED BY THE STATE BOARD OF HEALTH TO BE DANGEROUS TO THE PUBLIC HEALTH IN TOWNS OF LESS THAN 10,000 POPULATION.

[Under the provisions of chapter 210, Acts of 1913.]

DISEASE.	Place.	WEEK ENDING —				
		Jan. 1.	Jan. 10.	Jan. 17.	Jan. 24.	Jan. 31.
Tuberculosis, pulmonary (or not classified).	Amesbury,	–	–	–	1	–
	Berkley,	–	–	–	–	1
	Blackstone,	–	–	–	1	–
	Braintree,	–	–	1	–	–
	Bridgewater,	2	–	–	–	2
	Dudley,	–	1	–	–	–
	Falmouth,	–	1	–	–	–
	Hadley,	–	1	–	–	–
	Hampden,	–	–	–	1	–
	Hatfield,	–	–	1	–	–
	Ipswich,	–	1	–	–	–
	Marblehead,	–	–	–	–	1
	Merrimac,	–	–	1	–	–
	N. Attleborough,	1	1	–	–	1
	Northbridge,	–	–	1	–	–
	Norton,	–	–	1	–	–
	Palmer,	–	–	1	–	–
	Plympton,	–	–	–	–	1
	Townsend,	–	1	–	–	–
	Upton,	–	–	–	–	1
	Ware,	1	–	–	–	–
Total,		4	6	6	3	7
Tuberculous meningitis.	Lanesborough,	–	1	–	–	–
Tuberculosis, other forms.	Bridgewater,	–	1	–	–	–
	Swampscott,	–	1	–	–	–
Total,		–	2	–	–	–
Diphtheria,	Barnstable,	–	1	–	–	–
	Bridgewater,	–	–	–	1	–
	N. Attleborough,	–	–	1	–	–
	Swampscott,	–	1	–	–	–
	Upton,	–	–	–	–	1
	Walpole,	–	–	–	1	–
Total,		–	2	1	2	1
Scarlet fever,	Mansfield,	–	–	–	–	1
	Northbridge,	–	–	–	–	2
	Norton,	–	–	1	–	–
Total,		–	–	1	–	3
Whooping cough,	Marblehead,	1	–	1	–	–
Anterior poliomyelitis,	Wareham,	–	1	–	–	–

REPORT ON INSPECTION OF FOOD AND DRUGS.

LABORATORY EXAMINATIONS OF FOOD AND DRUGS.

The following tables present the results of the laboratory examinations during the month of January, 1914, of samples of food and drugs collected by inspectors of the Board: —

The cities and towns in which samples were collected were: Adams, Arlington, Attleborough, Boston, Braintree, Brockton, Brookline, Cambridge, Canton, Chicopee, Fall River, Holyoke, Hudson, Lawrence, Lexington, Lowell, Ludlow, Lynn, Malden, Medford, Newburyport, North Adams, North Attleborough, Northampton, Peabody, Pittsfield, Quincy, Sherborn, Somerville, Springfield, Taunton, Waltham, Watertown, West Springfield, Westford, Winchester, Winthrop, Woburn, Worcester.

Summary of Analyses.

ARTICLES EXAMINED.	Number found to be of Good Quality.	Number adulterated or varying from the Legal Standard.	Total.
Antiseptic for food,	–	1	1
Bread,	3	–	3
Butter,	5	2	7
Canned meats,	3	–	3
Cheese,	2	–	2
Cider,	11	5	16
Cocoa,	2	–	2
Coffee,	1	–	1
Condensed milk,	5	–	5
Confectionery,	1	1	2
Cream,	42	5	47
Cream of tartar,	2	–	2
Drugs,	345	84	429
Eggs,	12	1	13
Fruit juices: —			
Lime juice,	2	–	2
Grape juice,	1	–	1
Flavoring extracts: —			
Lemon,	–	1	1
Vanilla,	5	–	5
Honey,	3	–	3
Horse-radish,	1	–	1
Jams and jellies,	3	1	4
Lard,	5	–	5
Maple sugar,	3	4	7
Maple syrup,	16	2	18
Meat products: —			
Blood,	1	–	1
Hamburg steak,	1	–	1
Sausages,	36	20	56

Summary of Analyses — Concluded.

ARTICLES EXAMINED.	Number found to be of Good Quality.	Number adulterated or varying from the Legal Standard.	Total.
Milk,	427	87	514
Olive oil,	26	1	27
Pickles,	3	7	10
Salad dressing,	3	–	3
Shrimp,	–	1	1
Spices,	11	–	11
Table sauce,	1	–	1
Tea,	1	–	1
Totals,	983	223	1,206

PROSECUTIONS FOR VIOLATIONS OF THE LAW RELATING TO FOOD AND DRUGS.

Eight convictions were secured during the month of January, 1914, for selling adulterated food and drugs, as follows: —

No.	NAME OF DEFENDANT.	Place.	Character of Article sold.
1	Ernest McConnell,	Quincy,	Cider (salicylic acid).
2	Gaetano Ravesi,	Quincy,	Cider (benzoic acid).
3	Edward B. Curry,	Quincy,	Cider (benzoic acid).
4	Vermont Farmers Company.	Springfield,	Maple syrup (25 per cent. cane sugar).
5	Joseph Lemay,	Fall River,	Milk (total solids, 10.28).[1]
6	Louis Gintel,	Taunton,	Milk (total solids, 11.24).[1, 2]
7	Parks Sausage and Provision Company.	Boston,	Sausage (corn starch).
8	Henry Siegel Company,	Boston,	Sweet spirit of nitre (not U. S. P.).

[1] Appealed.

[2] Watered.

Fines imposed, $365.

LIST OF SAMPLES OF FOOD, DRUGS AND MILK COLLECTED DURING THE MONTH OF JANUARY, 1914.

Samples of Food in which No Adulteration was detected.

BREAD.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
5977-S	Ferguson's, Boston,	Ferguson's Graham.
5939-S	Pratt's, Boston,	Pratt's White (unwrapped).
5941-S	Pratt's, Boston,	Pratt's White (wrapped).

CANNED FOODS.

Chicken Soup.

q 12969	New York Butter Company, Worcester,	Joseph Campbell Company, Camden, N. J.

Tunny Fish.

5737-S	C. Tonnelli, Boston,	Tonno all' olio d'Oliva, Genoa.
5739-S	C. Tonnelli, Boston,	Tunny Fish in Olive Oil, Genoa.

CHEESE.

q 12970	New York Butter Company, Worcester.	
q 12955	Public Market, Holyoke.	

CIDER.

6786-R	E. E. Gray Company, Lexington,	New England Maple Syrup Co., Boston.
5991-S	F. L. Horne, Springfield.	
23113	F. P. Merrill, Cambridge,	J. G. Turner, Medford.
23287	Rood & Woodbury, Springfield,	Lawson Pink Food Products Company, Boston.

COCOA

6804-R		Rockwood & Co., New York. Breakfast Company.
5635-S	Morningside Butter and Tea Store, Pittsfield,	Empress, Morning Side Butter and Tea Store, Pittsfield.

COFFEE.

23404		

CONDENSED MILK.

23139	Gatley's Market, West Newton,	Boston Condensed Milk Company.
20447		Borden's Condensed Milk Company.
6010-R		Eagle Brand, Borden's Condensed Milk Company.
6826-R	Tyler Cash Market, Pittsfield.	Highland Milk Condensing Company.

CREAM OF TARTAR.

6838-R	Mandigos Grocery, Pittsfield,	Stickney & Poor's, Boston.
6848-R	Mobican Company, Pittsfield.	Austin, Nichols Company, New York.

Samples of Food in which No Adulteration was detected — Continued.

Eggs.

Number of Sample.	Dealer.	Brand, Wholesaler or Manufacturer.
5961–S	M. Brown & Co., Boston.	
5963–S	M. Brown & Co., Boston.	
5965–S	M. Brown & Co., Boston.	
5767–S	M. Brown & Co., Boston.	
6009–S	M. Brown & Co., Boston.	
6011–S	M. Brown & Co., Boston.	
6013–S	M. Brown & Co., Boston.	
6015–S	M. Brown & Co., Boston.	
6019–S	Boston.	
6021–S	Boston.	
6023–S	Boston.	
6025–S	Boston.	

Grape Juice.

7308–R	S. G. Emmanuel & Co., Quincy,	The Daggett Company, Boston.

Vanilla Extract.

6740–R	Importers Outlet Company, Somerville,	Imperial Brand.
6814–R	S. Robinson, Pittsfield,	Charter Oak Brand.
23318	Sears & Co., Holyoke,	Frank W. Cole, Springfield.
22679		Frank W. Cole, Springfield.
23680		Frank W. Cole, Springfield.

Honey.

23181	J. Dennis, Fall River,	Elmer Bassett, Taunton.
6852–R	McCormack & Joyce, Pittsfield,	Health Brand, Lewis DeGroff & Son, New York.
23320	Sears & Co., Holyoke,	L. Sears & Co., Holyoke.

Horse-radish.

23310	New York Delicatessen, Springfield,	E. C. Bugbee, Somers, Conn.

Ice Cream.

7306–R	S. G. Emmanuel Company, Quincy.	
5933–S	Patsiadi Bros., Boston.	
6057–S	Wm. Young, Winchester,	Wm. Young, Winchester.
6059–S	Wm. Young, Winchester,	Wm. Young, Winchester.
5931–S		Boston Ice Cream Company, Boston.

Jams and Jellies.

23182	J. Dennis, Fall River,	Queen Brand Apple Jelly. S. J. Van Lill Company, Baltimore, Md.
23383	Rhodes Bros., Boston,	Red Currant Jelly. Mrs. C. E. Chapin, Boston.
23384	Rhodes Bros., Boston,	Jelly.

Lard.

7154–R	Crocker & Co., Dorchester.	
5533–S	Parson's Cash Store, West Medford.	
5695–S	Union Market, Lowell.	

Samples of Food in which No Adulteration was detected — Continued.

MAPLE SUGAR.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
23319		
7286–R	C. S. Johnson, Boston, ...	Reed Bros., Woonsocket, Vt.
5649–S	Polley's, Pittsfield.	

MAPLE SYRUP.

6940–R	Adams Market, Quincy, ...	White Label. Simpson Spring Co., South Easton.
6958–R	Arnold's Grocery, Worcester, ...	Welch Bros. Maple Company, Burlington, Vt.
5641–S	Atlantic and Pacific Tea Company, Pittsfield, .	Towle Maple Products Company, Vermont.
6976–R	Geo. C. Blanchard, Worcester, ...	Vermont Maid. Towle Maple Products Company, Vermont.
7208–R	J. B. Blood, Lynn, ...	J. B. Blood Company, Lynn.
5645–S	Cooley, Pittsfield.	
5643–S	Pittsfield, ...	Sunbeam. Austin Nichols & Co., New York.
6782–R	Lexington Creamery, Lexington.	
7158–R	Leonard's Grocery, Braintree, ...	Blue Label. Curtice' Bros. Company, Rochester, N. Y.
6854–R	McCormack & Joyce, Pittsfield.	
23315	Smith & Murray, Springfield, ...	Vermont Farmers Company, Springfield.

MEAT PRODUCTS.

Hamburg Steak.

5699–S	Union Market, Lowell.	

Mince Meat.

23291	Public Market, Springfield.	

Sausage.

23323	M. Isenberg & Co., Holyoke.	
23325	M. Isenberg & Co., Holyoke.	
23324	M. Isenberg & Co., Holyoke.	
q 12947	R. F. Kelton & Co., Holyoke.	
q 12948	R. F. Kelton & Co., Holyoke.	
23312	New York Delicatessen, Springfield.	
23313	New York Delicatessen, Springfield.	

Blood Pudding.

7272–R	Coughlin & Donovan, Quincy.	
5689–S	Frank Dostatter, Lowell.	
5715–S	Front Street Market, Worcester, ...	Bertel.
5717–S	Front Street Market, Worcester.	
23159	Harris & Moore, Lawrence.	
7254–R	Lawrence Market, Lawrence.	
5723–S	Public Market, Worcester.	
7586–R	Saunder's Market, Lowell.	

Blood.

5719–S	Bertel, Worcester.	

Samples of Food in which No Adulteration was detected — Continued.

MEAT PRODUCTS — *Concluded.*

Frankfort Sausage.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
7422–R	Adams Market, Quincy.	
5741–S	Bay State Packing Company, Boston.	
7210–R	J. B. Blood, Lynn.	
23303	Hudner's Market, Fall River.	
23454	Hudner's Market, Fall River.	
23157	Harris & Moore, Lawrence.	
7420–R	Johnson Bros., Quincy, ...	Baldeau.
23161	Lawrence Public Market, Lawrence.	
7472–R	Mohican Company, Salem.	
7260–R	Mohican Company, Lawrence.	
q 12920	Mohican Company, Springfield.	
23451	Provision Store, Fall River.	
23290	Public Market, Springfield.	
23285	Rood & Woodbury, Springfield.	
q 12919	Michael Solin, Chicopee.	
23449	Whitehead's Market, Fall River.	

Pork Sausage.

6978–R	Geo. C. Blanchard, Worcester.	
23156	Harris & Moore, Lawrence.	
23302	Hudner's Market, Fall River.	
23456	Hudner's Market, Fall River.	
23301	Hudner's Market, Fall River.	
7418–R	Johnson Bros., Quincy, ...	Park Sausage Company, Boston.
6840–R	Mandigos Grocery, Pittsfield.	
q 12921	Mohican Company, Springfield.	
23453	Plymouth Market, Fall River.	
23292	Public Market, Springfield.	
23284	Rood & Woodbury, Springfield.	

Tomato Sausage.

23158	Harris & Moore, Lawrence.	
23455	Hudner's Market, Fall River.	
7256–R	Lawrence Market, Lawrence.	
23452	Plymouth Market, Fall River.	

OLIVE OIL.

7466–R	C. A. Carbone, Salem, ...	Chas. Carbone, Boston.
7186–R	Davis & Young, Lynn, ...	Beri & Lacan, Nice, France.
7116–R	Fruit Store, Merrimack Street, Newburyport.	
7216–R	Fruit Store, corner Union and Mulberry streets, Lynn.	
7214–R	Fruit Store, 157 Union Street, Lynn.	
7240–R	Fruit Store, 415 Essex Street, Lawrence.	
7118–R	Fruit Store, corner Inn Street, Newburyport, .	Araret Grocery Company, Boston.
6934–R	Fruit Store, opposite Bank, Quincy Square, Quincy,	Aggeles & Vougas, Boston.
6984–R	Fish Market, 115 Portland Street, Boston, .	Wm. M. Flanders Company, Boston.
6806–R	Grocery Store, 157 Nahcona Street, Pittsfield, .	H. Etienne Boulle, Marseilles, France.
7014–R	Grocery Store, 426 Worthington Street, Springfield.	
6802–R	Italian Grocery, Burbank Street, Pittsfield, . .	Vincenzo Fu Luigi Salvo.
6980–R	Italian Grocery, 28 Shrewsbury Street, Worcester.	
5937–S	Laverone & Co., Boston.	
5733–S	Joseph Max, Boston, ...	White Cross Brand.
7130–R	Emile Prevot, Dorchester, ...	Finest Sublime Lucca Oil.
7248–R	Ragus Tea Company, Lawrence, ...	C. H. Dragon-Noirel, France.
7300–R		
7074–R	J. Silradi, North Adams.	
6982–R	Special Groceries, Shrewsbury Street, Worcester.	
5735–S	Spiropolous & Co., Boston, ...	Spiro Brand.
7016–R	F. Stagnaro, Springfield.	
5935–S	C. Tonnelli, Boston.	
5969–S	A. Winn, Boston.	
5927–S	Zorza, Boston.	

Samples of Food in which No Adulteration was detected — Concluded.

PEANUT OIL.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
6678-R	Smith & Murray Company, Springfield,	Franco-Dutch Oil Works, Holland.

PICKLES.

5845-S		
5847-S		
5909-S	A. F. Foster, Lynn,	Libby, McNeil & Libby.
6810-R	Grocery Store, Pittsfield,	E. R. Durkee & Co., New York.
q 12950	R. F. Kelton & Co., Holyoke.	
q 12949	R. F. Kelton & Co., Holyoke.	
q 12952	J. R. Smith & Co., Holyoke.	

SALAD DRESSING.

7156-R	Leonard Grocery, Braintree,	F. P. Adams Company, Boston.
7250-R	Ragus Tea Company, Lawrence,	Ragus Tea and Coffee Company, New York.

SPICES.

Pepper.

6846-R	Mohican Company, Springfield,	The Mohican Company, New York.
23385	Rhodes Bros., Boston,	Tremont. Rhodes Bros. Company, Boston.
23386	Rhodes Bros., Boston,	Tremont. Rhodes Bros. Company, Boston.
q 12951	L. Sears, Holyoke,	Gauntlett. E. R. Durkee & Co., New York.

Mace.

5535-S	Parsons Cash Store, West Medford,	Stickney & Poor, Boston.

Mustard.

23317	Sears & Co., Holyoke,	B. Fischer & Co.

RASPBERRY SYRUP.

5525-S	Holden & Stone, Pittsfield,	Falcon Packing Company, New York.

Samples of Food which upon Examination were found to be labeled in Accordance with Law.

RENOVATED BUTTER AND OLEOMARGARINE.

5979-S	S. K. Ames, Winchester.	
5981-S	Central Cash Market, Lynn.	
5955-S	Marianna R. Menezes, Cambridge.	
q 12925	Mohican Company, Springfield.	
5797-S	Public Market, North Adams.	

COMPOUND LARD.

q 12924	Mohican Company, Springfield.	
q 12954	Public Market, Holyoke.	

Samples of Food which upon Examination were found to be labeled in Accordance with Law — Concluded.

TABLE SYRUP.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
q 12923	Mohican Company, Springfield.	

TOMATO CATSUP.

7252-R	Ragus Tea Company, Lawrence,	E. Pritchard, New York.

Samples of Food which upon Examination were found to be adulterated.

BUTTER (OLEOMARGARINE).

q 12966	New York Butter Company, Worcester.	
q 12953	Public Market, Holyoke.	

CIDER (CONTAINING BENZOIC ACID).

5993-S	F. L. Horne, West Springfield.	
23388	J. E. Moran, Boston.	

CONFECTIONERY (CONTAINING PARAFFIN).

6007-S	Terminal Company, Boston.	

SPINDLE CITY BUTTER (CONTAINING BENZOIC ACID).

7526-R	C. M. Bourgeois, Lowell,	Mansfield, Witham & Co., Lowell.

MAPLE SUGAR (CONTAINING CANE SUGAR).

6936-R	Fruit Store, front of railroad station, Quincy.	
7242-R	Fruit Store, 415 Essex Street, Lawrence.	
7244-R	Fruit Store, 415 Essex Street, Lawrence.	
7246-R	Fruit Store, 415 Essex Street, Lawrence.	

MAPLE SYRUP (CONTAINING CANE SUGAR SYRUP).

23486[1]	John M. Dean, Fall River,	J. H. Barker & Co., New York.
6938-R	E. E. Gray, Quincy,	New England Maple Syrup Company, Boston.
6808-R[2]	Grocery Store, corner Tyler and Smith streets, Pittsfield.	New England Maple Syrup Company, Boston.
6812-R[2]	S. Ferris, Pittsfield,	Towle Maple Products Company, Vermont.
6850-R[2]	Public Market, Pittsfield,	Towle Maple Products Company, Vermont.
5647-S[2]	John C. West & Bro., Pittsfield,	Rigney & Co., New York.

OLIVE OIL (CONTAINING COTTONSEED OIL).

5729-S		Baron del Bosco.

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[1] Per cent. of ingredients not stated.

[2] Sold as maple syrup.

Samples of Food which upon Examination were found to be adulterated — Concluded.

Meat Products.

Hamburg Steak (containing a Compound of Sulphurous Acid).

Number of Sample.	Dealer.	Brand, Wholesaler or Manufacturer.
23326	Holyoke Public Market, Holyoke,	Holyoke Public Market, Holyoke.

Mince Meat (containing Benzoic Acid).

Number of Sample.	Dealer.	Brand, Wholesaler or Manufacturer.
5637-S	J. A. Allard, Pittsfield.	
23288	Rood & Woodbury, Springfield.	

Sausages (containing Cereal).

Number of Sample.	Dealer.	Brand, Wholesaler or Manufacturer.
5731-S		Bay State Packing Company, Boston.
5743-S	Bay State Packing Company, Boston,	Elite Brand.
7304-R	Boston Market, Quincy.	
6942-R	Coughlin & Donovan, Quincy.	
5691-S	Frank Dostatter, Lowell.	
q 12890	Alex Dzearzak, Peabody,	I. W. Rounsevelt, Boston.
23304	Hudners Market, Fall River.	
23160	Lawrence Public Market, Lawrence.	
7492-R	Market, 95 Staniford Street, Boston.	
7490-R	Market, 95 Staniford Street, Boston.	
5957-S	Marianna R. Menezes, Cambridge.	
q 12922	Mohican Company, Springfield.	
7258-R	Mohican Company, Lawrence.	
7374-R	Mohican Company, Lawrence.	
7504-R	Mohican Company, Lawrence.	
23450	Provision Store, 46 Pleasant Street, Fall River.	
5793-S	Public Market, North Adams.	
5905-S	Peter Reeves, Lawrence.	
23183	Red Market, Fall River.	
23184	Red Market, Fall River.	
7588-R	Saunders Market, Lowell.	
5791-S	Store, Holden and River Streets, North Adams.	
5697-S	Union Market, Lowell.	

PICKLES (CONTAINING ALUM).

Number of Sample.	Dealer.	Brand, Wholesaler or Manufacturer.
5693-S		
7212-R	J. B. Blood, Lynn.	
5907-S	Central Cash Market, Lynn,	Lutz & Shramm.
5795-S	Public Market, North Adams.	

Samples of Drugs in which No Adulteration was detected.

Alcohol.

Number of Sample.	Dealer.	Wholesaler or Manufacturer.
23423	Beech & Kane, Springfield.	
23424	Beglieo & Co., Springfield.	
23407	J. Cannon Company, Boston,	J. Cannon Company.
q 13012	Cobb, Aldrich Company, Boston.	
23321	Cunningham & Co., Holyoke.	
q 13013	Santa Clara Company, Boston.	
7072-R	Owen W. Welch, North Adams.	
q 12965	Wolf Tone & Co., Springfield.	

Samples of Drugs in which No Adulteration was detected — Continued.

ANISE SEED CORDIAL (N. F.).

Number of Sample.	DEALER.	Wholesaler or Manufacturer.
7192-R	G. E. Thomas Company, Lynn.	

BLUE OINTMENT.

5747-S	I. N. Barker, Springfield.	
5709-S	Brewer & Co., Worcester.	
5749-S	H. & J. Brewer, Springfield.	
5086-R	Carleton & Hovey, Lowell.	
7414-R	Clyde T. Cox, Quincy.	
7486-R	Davis & Young, Lynn.	
7508-R	John J. Forest, Lawrence.	
7368-R	Forrest's Drug Store, Lawrence.	
5913-S	Himmel Drug Company, Lynn.	
6001-S	E. F. Leonard & Co., Springfield.	
7506-R	L. K. Liggett, Lawrence.	
5084-R	A. E. Moors, Lowell.	
7488-R	Nelson's Drug Store, Lynn.	

BORIC ACID OINTMENT.

7484-R	Davis & Young, Lynn.	

GLYCERINE.

7140-R	Smith Bros., Dorchester.	

HYDROGEN DIOXIDE.

23027	Miss Macaulay, Boston,	Larkin Company, New York.
7372-R	Robertson Sutherland Company, Lawrence,	Custer Chemical Company, New York.

OLIVE OIL.

5759-S	Hastings Pharmacy, North Adams.	
7266-R	C. C. Hearn, Quincy.	
6966-R	Liggett's Drug Stores, Hall & Lyon, Worcester.	
7031-S	W. H. Willis, Reading.	

PEACH KERNEL OIL.

5953-S	Herbert F. Browne, Cambridge.	

SPIRIT OF ANISE.

7036-R	Apothecary Hall, North Adams.	
7168-R	A. M. Bailey, Lynn.	
23194	Bradford Pharmacy, North Adams.	
23191	Frank A. Brandle, Northampton.	
7294-R	Coleman & Donovan, Boston.	
7148-R	Connolly & Davis, Dorchester.	
7174-R	Davis & Young, Lynn.	
7180-R	Emery & Taylor, Lynn.	
7390-R	Engstrom's Pharmacy, Pittsfield.	
7024-R	Farley's Drug Store, North Adams.	
7026-R	T. C. Farley, North Adams.	

Samples of Drugs in which No Adulteration was detected — Continued.

SPIRIT OF ANISE — *Concluded.*

Number of Sample.	DEALER.	Wholesaler or Manufacturer.
q 12982	Foley the Druggist, Worcester.	
7230–R	John J. Forest, Lawrence.	
7236–R	W. H. Glover, Lawrence.	
7138–R	Charles O. Gowan, Dorchester.	
7626–R	Green the Druggist, Worcester.	
7132–R	K. J. Hart & Co., Dorchester.	
7128–R	High Street Pharmacy, Newburyport.	
7200–R	Fred L. Hopkins, Lynn.	
7672–R	W. B. Hunt Company, Malden.	
7444–R	Jaynes Drug Company, Salem.	
7182–R	Jaynes Drug Store, Lynn.	
7594–R	Jaynes Drug Company, Worcester.	
7002–R	James J. Keaney, Malden.	
6962–R	Liggett's Drug Store, Worcester.	
7276–R	E. H. Patten, East Cambridge.	
7006–R	Pinkhams Pharmacy, West Medford.	
7082–R	John A. Rice, North Adams.	
7202–R	Ropes Drug Store, Lynn.	
7464–R	Ropes Drug Company, Salem.	
6952–R	Scandinavian Pharmacy, Worcester.	
7442–R	The Colonial Drug Store, Salem.	
7458–R	The Corner Drug Store, Salem.	
7456–R	Upton & Frisbee, Salem.	
7324–R	W. A. Whitney, West Medford.	
7030–R	Wilson House Drug Store, North Adams.	

SPIRIT OF CAMPHOR.

23207	Arborway Pharmacy, Forest Hills, Boston.	
23382	Chester A. Baker, Boston.	
23328	Charles E. Bardwell, Holyoke.	
23219	Edward F. Bigelow, Roxbury.	
23223	Brown's Pharmacy, Roxbury.	
7270–R	H. F. Browne, Cambridge.	
23440	Cheney & Neill, Boston.	
q 12978	E. J. Churchill, Worcester.	
q 12828	Comfort Pharmacy, Boston.	
23347	Commonwealth Avenue Pharmacy, Allston.	
23438	A. W. Cunningham, Springfield.	
7188–R	Davis & Young, Lynn.	
6816–R	Drug Store, Morning Side Square, Pittsfield,	Williams Carleton Co., Conn.
23204	Geo. W. Flynn, Jamaica Plain.	
23339	Foley the Druggist, Worcester.	
q 12956	A. F. Glesmann, Holyoke.	
23379	J. G. Godding & Co., Boston.	
q 12961	Goodall Drug Company, Holyoke.	
23331	Green the Druggist, Holyoke.	
23355	Henry L. Greene, Allston.	
7436–R	Hall & Lyon, Salem.	
7268–R	C. C. Hearn, Quincy.	
23358	E. E. Heinlein & Co., Brighton.	
q 12973	M. G. Hirshon, Worcester.	
23218	Humboldt Pharmacy, Boston.	
23435	Marshall R. Johnson, Springfield.	
23199	Albert E. Lerche, Springfield.	
23216	H. S. Marvin, Boston.	
7264–R	Edward J. Murphy, Quincy.	
23425	W. B. Noble, Springfield.	
23354	Charles Paine, Allston.	
23210	E. L. Sawyer, Boston.	
23431	Chas. S. Sexton Company, Springfield.	
7316–R	Shepard's Drug Store, Boston.	
23428	Sikes Drug Store, Springfield.	
23369	Siskind's Pharmacy, Roxbury.	
7142–R	Smith Bros., Dorchester.	
23422	John D. Smith, Springfield.	
23350	The Allston Drug Store, Allston.	
23368	Frank Tucker, Roxbury.	
23222	J. B. Walsh & Co., Roxbury.	
23351	Harvey D. Watson Company, Allston.	
23434	Wheeler's Drug Store, Springfield.	

Samples of Drugs in which No Adulteration was detected — Continued.

SPIRIT OF NITROUS ETHER.

Number of Sample.	DEALER.	Wholesaler or Manufacturer.
7034-R	Apothecary Hall, North Adams.	
7170-R	A. M. Bailey, Lynn.	
5999-S	Irving R. Barker, Springfield.	
7078-R	Bradford's Pharmacy, North Adams.	
5755-S	C. S. Browning, Ludlow.	
7004-R	John H. Cheever, Arlington.	
7296-R	Coleman & Donovan, Boston.	
7448-R	The Colonial Drug Store, Salem.	
5657-S	Concord Drug Company, Lowell, ...	Griffith & Shea.
5925-S	Curtis & Ellis, Lynn.	
23195	Lucius S. Davis, Northampton.	
7176-R	Davis & Young, Lynn.	
6996-R	James F. Doherty, Cambridge.	
q 12981	B. J. Elkind & Co., Worcester.	
7178-R	Emery & Taylor, Lynn.	
5917-S	Emery & Taylor, Lynn.	
7388-R	Engstrom's Pharmacy, Pittsfield.	
23410	Epstein Drug Company, Boston.	
7578-R	Albert L. Field, Lowell.	
7234-R	John J. Forest, Lawrence.	
7134-R	C. P. Flynn, Boston.	
5971-S	L. M. Geddes & Co., Allston.	
q 12958	A. F. Glesmann, Holyoke.	
7334-R	Wm. H. Glover, Lawrence.	
q 12960	Goodall Drug Company, Holyoke.	
7136-R	Charles O. Gowan, Dorchester.	
23332	Green the Druggist, Springfield.	
5995-S	Green the Druggist, Springfield.	
7624-R	Green the Druggist, Worcester.	
23343	James F. Guerin, Worcester.	
23213	Henry L. Hadcock, Roxbury.	
q 12974	M. G. Hirshon, Worcester.	
23375	Hubbell & McGowan, Boston.	
7674-R	W. B. Hunt Company, Malden.	
7184-R	Jaynes Drug Store, Lynn.	
6974-R	Jaynes Drug Store, Worcester.	
q 12971	Levasseur's Washington Square Pharmacy, Worcester.	
7590-R	Levasseur's Washington Square Pharmacy, Worcester.	
23366	Edward J. Keeler & Co., Boston.	
q 12825	J. H. Marshall, Boston.	
7292-R	Martin, Joseph A., Boston.	
7288-R	J. W. Patch & Co., Boston.	
7572-R	Phelan's Pharmacy, Lowell.	
7084-R	John A. Rice, North Adams.	
7020-R	River Street Drug Store, North Adams.	
7204-R	Ropes Drug Store, Lynn.	
7462-R	Ropes Drug Company, Salem.	
7218-R	Chas. E. Scheffler, Lawrence.	
23432	Chas. S. Sexton Company, Springfield.	
7318-R	Shepard's Drug Store, Boston.	
23437	Sikes Drug Store, Springfield.	
23308	Richard F. Smith, Fall River.	
5629-S	W. C. Taylor, Pittsfield.	
7454-R	Upton & Frisbee, Salem.	
7322-R	W. A. Whitney, West Medford.	
7032-R	Wilson House Drug Store, North Adams.	
23189	Wiswell the Druggist, Northampton.	

SPIRIT OF PEPPERMINT.

23349	The Allston Drug Store, Allston.	
23206	Arborway Pharmacy, Forest Hills, Boston.	
23381	Chester A. Baker, Boston.	
23329	Charles E. Bardwell, Holyoke.	
6832-R	Eli Bence, Pittsfield.	
7380-R	Eli Bence, Pittsfield.	
23220	Edward F. Bigelow, Roxbury.	
6836-R	H. L. Brown, Pittsfield.	
23224	Brown's Pharmacy, Roxbury.	
23441	G. S. Cheney Company, Boston.	
5753-S	J. E. Chennette, Indian Orchard.	

Samples of Drugs in which No Adulteration was detected — Continued.

Spirit of Peppermint — *Concluded.*

Number of Sample.	Dealer.	Wholesaler or Manufacturer.
23337	E. J. Churchill, Worcester.	
6954-R	Churchill's Pharmacy, Worcester.	
7232-R	Clarke Drug Store, Lawrence.	
q 12827½	The Comfort Cut-Price Drug Store, Boston.	
23348	Commonwealth Avenue Pharmacy, Allston.	
23196	Lucius L. Davis, Northampton.	
23306	Davis Pharmacy, Fall River.	
q 12980	B. J. Elkind & Co., Worcester.	
6820-R	Engstrom's Pharmacy, Pittsfield.	
7280-R	Epstein Drug Company, Boston.	
23409	Epstein Drug Company, Boston.	
23205	Geo. W. Flynn, Jamaica Plain.	
23338	Foley the Druggist, Worcester.	
q 12957	A. F. Glesmann, Holyoke.	
23380	J. G. Godding & Co., Boston.	
q 12959	Goodall Drug Company, Holyoke.	
23356	Henry L. Greene, Allston.	
23333	Green the Druggist, Holyoke.	
q 12820	Green's Pharmacy, Boston.	
6968-R	James F. Guerin, Worcester.	
23344	James F. Guerin, Worcester.	
23214	Henry L. Hadcock, Roxbury.	
6830-R	William R. Hagyard, Pittsfield.	
7384-R	William R. Hagyard, Pittsfield.	
7438-R	Hall & Lyon, Salem.	
23198	A. H. Hastings, Easthampton.	
23357	E. E. Heinlein & Co., Brighton.	
7378-R	Dolor J. Herbert, Pittsfield.	
q 12976	M. G. Hirshon, Worcester.	
23377	H. D. Huggan Drug Company, Boston.	
23217	Humboldt Pharmacy, Boston.	
7284-R	Jaynes Drug Company, Boston.	
7446-R	Jaynes Drug Company, Salem.	
23436	Marshall R. Johnson, Springfield.	
23365	Edward J. Keeler, Boston.	
23187	Charles B. Kingsley, Northampton.	
6964-R	Liggett's Drug Store, Worcester.	
23197	J. A. Loomis & Son, Easthampton.	
6834-R	Lowe's Drug Store, Pittsfield.	
q 12822	J. H. Marshall, Boston.	
23426	W. B. Noble, Springfield.	
23353	Charles Paine, Allston.	
23208	Perry & Morris, Jamaica Plain.	
7076-R	Quimbey's Drug Store, Adams.	
23211	Truman T. Reid, Roxbury.	
23361	Reliance Drug Company, Brighton.	
23360	D. F. Rourke, Brighton.	
7228-R	Chas. E. Scheffler, Lawrence.	
23430	Chas. S. Sexton Company, Springfield.	
23429	Sikes Drug Store, Springfield.	
23370	Siskind's Pharmacy, Roxbury.	
7190-R	G. E. Thomas Company, Lynn.	
6818-R	Union Drug Company, Pittsfield.	
23221	J. B. Walsh & Co., Roxbury.	
23352	Harvey D. Watson Company, Allston.	
23433	Wheeler's Drug Store, Springfield.	
23190	Wiswell the Druggist, Northampton.	
7282-R	Woodwards, Boston.	

Spirit of Wintergreen.

7314-R	Jaynes Drug Company, Boston.	
7312-R	Liggett's Drug Store, Boston.	
7310-R	The Walker-Rintels Company, Boston.	

Sweet Almond Oil.

5945-S	Albert E. Lynch & Co., Cambridge.	
5951-S	E. H. Patten, East Cambridge.	

Samples of Drugs in which No Adulteration was detected — Continued.

Tincture of Capsicum.

Number of Sample.	Dealer.	Wholesaler or Manufacturer.
7614–R	Hall & Lyon, Worcester.	
7482–R	J. Maro Harriman Drug Company, Lynn.	

Tincture of Iodine.

5807–S	Apothecary Hall, North Adams.	
7160–R	William G. Beer, Somerville.	
7150–R	T. A. Bishop, Dorchester.	
7432–R	Boston & Maine Pharmacy, Salem.	
7120–R	Eben Bradbury, Newburyport.	
5085–S	Fred L. Bradford, North Adams.	
6005–S	H. & J. Brewer Company, Springfield.	
q 12801	Brody & Co., Dorchester.	
7416–R	Paul J. Brown, the Norfolk Pharmacy, Norfolk Downs.	
5801–S	Burlingame & Darbys Company, North Adams.	
q 12867	E. E. Butman, Waltham.	
q 13011	Geo. O. Carter & Co., Waltham.	
5919–S	W. C. Chamberlain, Lynn.	
7222–R	Clarke Drug Store, Lawrence.	
q 12827	Comfort Pharmacy, Boston.	
7008–R	G. H. Copeland, Lexington.	
7262–R	Clyde T. Cox, Quincy.	
q 12800	E. Cummings, Charlestown.	
q 12821	Cut-Price Drug Store, Boston.	
7452–R	Depot Pharmacy, Salem.	
7290–R	H. J. Doherty, Boston.	
23335	S. Elkind, Worcester.	
7450–R	Elm Pharmacy, Salem.	
7440–R	Endicott Pharmacy, Salem.	
5811–S	T. C. Farkey, North Adams.	
7164–R	Fenelon's Pharmacy, Somerville.	
7604–R	William S. Flint, Worcester.	
q 12983	Foley the Druggist, Worcester.	
q 12865	H. C. Hall, Waltham.	
7126–R	High Street Pharmacy, Newburyport.	
7172–R	Himmels Drug Store, Lynn.	
23346	M. G. Hirshon, Worcester.	
q 12819	Hollis Street Pharmacy, Boston.	
5751–S	Indian Orchard Drug Store, Indian Orchard.	
7000–R	Kendall Drug Company, Cambridge.	
7668–R	Ellison J. Kimpton, Malden.	
23200	Albert E. Lerche, Springfield.	
6824–R	Maplewood Pharmacy, Pittsfield.	
q 12984	J. H. Marshall, Boston.	
23427	W. B. Noble, Springfield.	
7278–R	T. H. O'Donnell & Co., Cambridge.	
23362	Reliance Drug Store, Brighton.	
5803–S	Rices Drug Store, North Adams.	
5813–S	River Street Drug Store, North Adams.	
7224–R	A. F. Ryder, Lawrence.	
7226–R	C. E. Scheffler, Lawrence.	
5921–S	James B. Small, Lynn.	
7330–R	C. W. Smith, Medford.	
23201	John D. Smith, Springfield.	
5975–S	Staples & Towse, Allston.	
6003–S	C. P. Thompson & Co., Springfield.	
7010–R	W. A. Whitney, West Medford.	

Tincture of Myrrh.

7514–R	F. & E. Bailey, Lowell.	
7574–R	Carter & Sherbourne Co., Lowell.	
7512–R	Dows, Lowell.	
7516–R	Dows the Druggist, Lowell.	
7616–R	James F. Guerin, Worcester.	
7520–R	Hall & Lyon Company, Lowell.	
7524–R	Walter J. Keating, Lawrence.	

Samples of Drugs in which No Adulteration was detected — Concluded.

TINCTURE OF MYRRH—*Concluded.*

Number of Sample.	DEALER.	Wholesaler or Manufacturer.
7518-R	R. J. Lang Company, Lowell.	
7606-R	F. W. Lavoine, Worcester.	
7576-R	A. E. Moors, Lowell.	
7608-R	People's Pharmacy, Worcester.	
7522-R	A. F. Ryder, Lawrence.	
7620-R	N. R. Scott & Son, Worcester.	

TINCTURE OF VANILLA.

23334	Green the Druggist, Holyoke.	
q 12818	Halle's Pharmacy, Boston.	
q 12790	Mulhern's Pharmacy, Taunton.	
23203	John D. Smith, Springfield.	

WOOD ALCOHOL.

5799-S	Burlingame & Darbys Company, North Adams.	

PROPRIETARY DRUGS.

23097	Bruno's Balsam of Honey Compound, Hutchinson, Boston.	
7166-R	Compound Syrup Tolu, Tar and Wild Cherry, Albert Hale, Somerville.	
7146-R	Electra Liniment, Flynn's Pharmacy, Boston.	
q 12791	Mentholated Bronchial Lozenges, Mulhern's Prescription Pharmacy, Taunton.	
6908-R	Olum Liniment, J. Dupuis, Lowell.	

Samples of Drugs which upon Examination were found to be labeled in Accordance with Law.

ALCOHOL.

q 13014	Joseph Marlow & Co., Boston.	

PROPRIETARY DRUGS.

7144-R	Compound Syrup White Pine and Tar, C. H. Bradbury, Dorchester.	
23311	Fiedler's Green Herb Essence, New York Delicatessen, Springfield.	
5911	Himmel's Compound Hero-tol, Himmel Drug Company, Lynn.	
6970-R	Throataline, James F. Guerin, Worcester.	

Samples of Drugs which upon Examination were found to be adulterated.

BLUE OINTMENT.

Number of Sample.	DEALER.	Wholesaler or Manufacturer.	Per Cent. of required Strength.
7366-R	Drug Store, 200 Essex Street, Lawrence, . .	– –	64
7592-R	George A. Levasseur, Worcester, ...	H. K. Mulford Company, Philadelphia.	143
5701-S	Levasseur's Washington Square Pharmacy, Worcester.	H. K. Mulford Company, Philadelphia.	145
5915-S	Nelson's Pharmacy, Lynn, ...	– –	75

Samples of Drugs which upon Examination were found to be adulterated — Concluded.

SPIRIT OF ANISE.

Number of Sample.	DEALER.	Wholesaler or Manufacturer.	Per Cent. of required Strength.
7080-R	Bradford's Pharmacy, North Adams,	– –	79
5923-S	Curtis & Ellis, Lynn,	– –	66
7124-R	Goodridge Drug Company, Newburyport,	– –	79
7152-R	Huntington Pharmacy, Brockton,	– –	70
7220-R	Jaynes Drug Company, Lawrence,	– –	81
7198-R	Warren Toppan, Lynn,	– –	9
7474-R	William H. Townsend, Lynn,	– –	42

SPIRIT OF CAMPHOR.

7480-R	Lynn Pharmacy, Lynn,	– –	60
7478-R	People's Drug Company, Lynn,	– –	80
7194-R	People's Drug Company, Lynn,	– –	75
23202	John D. Smith, Springfield,	– –	55

SPIRIT OF NITROUS ETHER.

6956-R	Arnolds Grocery, Worcester,	Baker Extract Company, Springfield.	80
5745-S	Irvin R. Barker, Springfield,	– –	44
6946-R	Baxter's Pharmacy, Worcester,	– –	75
7680-R	Herbert F. Browne, Cambridge,	– –	84
7682-R	Herbert F. Browne, Cambridge,	– –	84
5757-S	C. S. Browning, Ludlow,	– –	90
5655-S	Brunelle Pharmacy, Lowell,	– –	67
6876-R	Falls & Burkinshaw, Lowell,	– –	79
7028-R	T. C. Farley, North Adams,	– –	86
6998-R	J. H. Fitzgerald, Cambridge,	– –	45
7238-R	Wm. H. Glover, Lawrence,	– –	45
5903-S	J. Maro Harriman Drug Company, Lynn,	– –	77
6990-R	James J. Keaney, Malden,	– –	73
7684-R	The Lynch Drug Company, Cambridge,	– –	80
7274-R	Albert E. Lynch Company, East Cambridge,	– –	74
6822-R	Maplewood Pharmacy, Pittsfield,	– –	73
7376-R	Pharmacie Francaise, Lawrence,	– –	20
7510-R	Pharmacie Francaise, Lawrence,	– –	11
6988-R	Pinkham Pharmacy, West Medford,	– –	69
7196-R	Geo. Y. Sawyer, Lynn,	– –	64
7476-R	Geo. Y. Sawyer, Lynn,	– –	81

SPIRIT OF PEPPERMINT.

6992-R	Garfield & Sawyer, Malden,	– –	62
23215	H. S. Marvin, Boston,	– –	82
6844-R	Mellville Pharmacy, Pittsfield,	– –	67
7012-R	Merriam's Pharmacy, Springfield,	– –	58
6986-R	O. G. Seeley, Lexington,	– –	62
23307	Richard F. Smith, Fall River,	– –	36

TINCTURE OF IODINE.

q 12866	Geo. O. Carter, Waltham,	– –	68
6994-R	Charles H. Gaffney, Cambridge,	– –	89
q 12868	E. E. Jennison, Waltham,	– –	83
7162-R	Maxwell's Drug Store, Somerville,	– –	64
7320-R	Maxwell's Drug Store, Somerville,	– –	58

PROPRIETARY DRUGS.

6944-R	Baby Cough Syrup, Baxter's Pharmacy, Worcester.	Pfeiffer Chemical Company, Philadelphia.	4[1]
6906-R	Dupuytreu's French Liniment, Falls & Burkinshaw, Lowell.	– –	24[1]
7022-R	Farley's Vegetable Cough Cure, C. M. Farley, North Adams.	– –	8[1]

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[1] Per cent. of alcohol.

Samples of Milk which upon Examination were found to be adulterated.

Number of Sample.	Name of Dealer, Wholesaler or Producer.	Results of Analyses.
23411	C. L. Barrus, Springfield, . . .	Total solids, 11.54 per cent.; fat, 2.40 per cent.; skimmed milk.
23413	C. L. Barrus, Springfield, . . .	Total solids, 11.46 per cent.; fat, 2.40 per cent.; skimmed milk.
6896-R	Gustave Bourgeos, Lowell, . . .	Total solids, 11.86 per cent.; fat, 2.80 per cent.; skimmed milk.
23273	John C. Burke, Springfield, . . .	Total solids, 11.50 per cent.; fat, 2.50 per cent.; skimmed milk.
6898-R	Coopers Lunch, Lowell, ...	Total solids, 14.66 per cent.; fat, 6.70 per cent.; contained added water.
23234	J. T. Dennison, Medford, . . .	Total solids, 11.76 per cent.; fat, 2.60 per cent.; skimmed milk.
7548-R	John F. Finnegan, North Billerica, .	Total solids, 11.58 per cent.; fat, 2.00 per cent.; skimmed milk.
7550-R	John F. Finnegan, North Billerica, .	Total solids, 11.58 per cent.; fat, 1.95 per cent.; skimmed milk.
7354-R	Chris Gaskis, Lowell, ...	Total solids, 11.36 per cent.; fat, 3.60 per cent.; contained added water.
6858-R	Charles H. Horne, Adams, . . .	Total solids, 10.52 per cent.; fat, 3.10 per cent.; contained added water.
6860-R	Charles H. Horne, Adams, . . .	Total solids, 11.20 per cent.; fat, 3.20 per cent.; contained added water.
6862-R	Charles H. Horne, Adams, . . .	Total solids, 12.04 per cent.; fat, 3.90 per cent.; contained added water.
6868-R	Walter T. Horne, North Adams, . .	Total solids, 10.92 per cent.; fat, 2.90 per cent.; contained added water.
23244	F. E. Lemay, Fall River, . . .	Total solids, 10.39 per cent.; fat, 2.80 per cent.; contained added water.
23245	F. E. Lemay, Fall River, . . .	Total solids, 10.48 per cent.; fat, 2.80 per cent.; contained added water.
23246	F. E. Lemay, Fall River, . . .	Total solids, 12.06 per cent.; fat, 4.20 per cent.; contained added water.
23247	F. E. Lemay, Fall River, . . .	Total solids, 10.04 per cent.; fat, 3.10 per cent.; contained added water.
23248	F. E. Lemay, Fall River, . . .	Total solids, 13.00 per cent.; fat, 5.20 per cent.; contained added water.
23249	F. E. Lemay, Fall River, . . .	Total solids, 11.07 per cent.; fat, 3.60 per cent.; contained added water.
23250	F. E. Lemay, Fall River, . . .	Total solids, 10.76 per cent.; fat, 3.40 per cent.; contained added water.
23293	Joseph Lemay, Fall River, . . .	Total solids, 10.76 per cent.; fat, 3.40 per cent.; contained added water.
23294	Joseph Lemay, Fall River, . . .	Total solids, 11.46 per cent.; fat, 3.60 per cent.; contained added water.
23295	Joseph Lemay, Fall River, . . .	Total solids, 11.60 per cent.; fat, 3.60 per cent.; contained added water.
23296	Joseph Lemay, Fall River, . . .	Total solids, 12.00 per cent.; fat, 4.60 per cent.; contained added water.
23297	Joseph Lemay, Fall River, . . .	Total solids, 10.48 per cent.; fat, 3.40 per cent.; contained added water.
23298	Joseph Lemay, Fall River, . . .	Total solids, 10.28 per cent.; fat, 3.20 per cent.; contained added water.
23299	Joseph Lemay, Fall River, . . .	Total solids, 11.13 per cent.; fat, 3.60 per cent.; contained added water.
23300	Joseph Lemay, Fall River, . . .	Total solids, 11.00 per cent.; fat, 3.90 per cent.; contained added water.
7096-R	John C. Moynihan, Newburyport, .	Total solids, 8.04 per cent.; fat, 0.60 per cent.; skimmed, containing added water.
5651-S	Anthony Paprowicz, Lowell, . . .	Total solids, 12.32 per cent.; fat, 2.90 per cent.; skimmed milk.
23282	Somers Creamery Co., Springfield, .	Total solids, 11.60 per cent.; fat, 2.50 per cent.; skimmed milk.
5683-S	Robert W. Stowell, Lowell, . . .	Total solids, 10.12 per cent.; fat, 3.00 per cent.; contained added water.
5685-S	Robert W. Stowell, Lowell, . . .	Total solids, 11.26 per cent.; fat, 3.30 per cent.; contained added water.

QUARTERLY REPORT ON COLD STORAGE.

During the months of October, November and December, 1913, seven licenses were renewed and three new licenses were granted cold-storage warehouses throughout the State.

The inspectors condemned, confiscated and destroyed a number of articles at the warehouses on account of being decomposed, tainted or otherwise unfit for food.

The following tables show the quantities of articles of food placed in cold storage during the three months preceding the first day of January, 1914; also, the quantities of butter and eggs held on the first day of January, 1914: —

ARTICLES PLACED IN COLD STORAGE.

ARTICLES.	Cases.	Dozens.	Packages.	Pounds.
Eggs, case, ...	29,545	886,370	–	–
Eggs, broken, ...	–	–	541	296,950
Butter, ...	39	–	43,948	2,651,899
Poultry, ...	65 [1]	8⅔	18,992	7,367,251
Game, ...	–	183	1,011 [2]	32,179
Meat, fresh, ...	241 [3]	–	15,581	5,488,266¾
Meat products, fresh (except in process of manufacture), .	100 [4]	–	8,351 [5]	1,574,445
Fish, fresh food, ...	993	–	3,599 [6]	6,868,439
Totals, ...	30,983	886,561⅔	92,023	24,279,429¾

[1] Includes 8 barrels.
[2] Includes 11 bundles, 2 pair partridges, 13 boxes and 14 crates.
[3] Includes 129 barrels.
[4] Reported as 100 boxes.
[5] Includes 191 boxes.
[6] Includes 8 gallons of scallops.

BUTTER AND EGGS HELD.

ARTICLES.	Cases.	Dozens.	Packages.	Pounds.
Eggs, case, ...	414,520	12,435,611	–	–
Eggs, broken, ...	–	300	1,251½	54,439
Butter, ...	1,634 [1]	47,900	339,045	27,069,682
Totals, ...	416,154	12,483,811	340,296½	27,124,121

[1] Includes 588 boxes.

ARTICLES IN COLD STORAGE CONDEMNED UPON PHYSICAL AND CHEMICAL EXAMINATIONS AS UNFIT FOR FOOD.

Date.	ARTICLES.	Weight (Pounds).	Reasons.	Dispositions.
Nov. 19, 1913	Venison, ...	80	Decomposed	Rendered
Nov. 26, 1913	Venison, ...	27	Decomposed	Rendered
Dec. 11, 1913	Geese and turkeys, . .	660	Decomposed	Rendered
Dec. 15, 1913	Broken-out eggs, . .	240	Decomposed	Rendered
Dec. 15, 1913	Sand eels, . . .	91	Decomposed	Rendered
Dec. 26, 1913	Beef livers, . . .	548	Decomposed	Rendered
Total, .	. . . . . .	1,646		

CHEMICAL EXAMINATIONS OF SAMPLES OF COLD-STORAGE GOODS.

ARTICLES.	Number found to be of Good Quality.	Number found to be Unfit for Food.	Total Number of Samples examined.
Beef livers,	–	1	1
Moose,	1	–	1
Totals,	1	1	2

During the months of December, 1913, and January, 1914, the following convictions were secured because articles of food were held in cold storage longer than twelve calendar months without the consent of the State Board of Health: —

NAME OF DEFENDANT.	Place.	Result.
Thomas D. Borst,	Boston,	Fined.
Willoughby L. Webb,	West Tisbury,	Filed for sentence and costs.
Arthur W. Robinson,	Boston,	Filed for sentence.
Dr. Heber Bishop,	Boston,	Filed for sentence.
Louis Levine,	Fall River,	Fined.
Charles S. Marshall,	Braintree,	Fined.
George M. D. Legg,	Boston,	Fined.
George H. Stockwell,	Cambridge,	Fined.
Percy W. Linscott,	Woburn,	Filed for sentence.
James D. Sullivan,	Danvers,	Filed for sentence.

Total amount of fines imposed, $39.

During the month of January, 1914, the following convictions were secured on account of the absence of a sign marked "Cold Storage Goods Sold Here"; also, representing cold-storage goods as fresh: —

No.	Date.	NAME OF DEFENDANT.	Place.	Result.
1	Jan. 19, 1914	Thomas Keenan,	South Boston,	Fined.
2	Jan. 19, 1914	Thomas Keenan,	South Boston,	Case filed.
3	Jan. 19, 1914	Louis Shindler,	South Boston,	Fined.
4	Jan. 19, 1914	Louis Shindler,	South Boston,	Fined.
5	Jan. 20, 1914	J. Arthur Gustowske,	East Boston,	Fined.[1]
6	Jan. 20, 1914	Jasper Deeran,	East Boston,	Fined.[1]
7	Jan. 20, 1914	Peter Graziano,	East Boston,	Fined.[1]
8	Jan. 20, 1914	Peter Graziano,	East Boston,	Fined.[1]
9	Jan. 20, 1914	Francis P. Howard,	East Boston,	Fined.[1]

[1] Appealed.

Total amount of fines imposed, $80.

REPORT ON THE PROSECUTIONS CONCERNING SALE OF EGGS TAKEN FROM COLD STORAGE.

CHAPTER 538, ACTS OF 1913.

The following convictions were secured because eggs "offered or exposed for sale" were not properly marked in accordance with the rules and regulations made by the State Board of Health: —

No.	Date.	NAME OF DEFENDANT.	Place.	Result.
1	Dec. 19, 1913	John L. Clemmey,	Fall River,	Fined.
2	Dec. 19, 1913	Jean B. Guevremont,	Fall River,	Fined.
3	Dec. 19, 1913	Edgar B. Whitehead,	Fall River,	Fined. [1]
4	Dec. 29, 1913	William J. Townsend,	Fitchburg,	Fined.
5	Dec. 29, 1913	Lawrence B. Scanlon,	Fitchburg,	Fined.
6	Jan. 2, 1914	Abe Brest,	Cambridge,	Case filed.
7	Jan. 2, 1914	Harris Ellis,	Cambridge,	Case filed.
8	Jan. 2, 1914	Hyman Shuman,	Cambridge,	Case filed.
9	Jan. 19, 1914	Louis Shindler,	South Boston,	Fined.
10	Jan. 20, 1914	Jasper Deeran,	East Boston,	Fined. [1]
11	Jan. 20, 1914	Peter Graziano,	East Boston,	Fined. [1]
12	Jan. 20, 1914	Francis P. Howard,	East Boston,	Fined. [1]
13	Jan. 21, 1914	William F. Harney,	Boston,	Fined.

[1] Appealed.

Total amount of fines imposed, $100.

QUARTERLY REPORT ON THE BUSINESS OF SLAUGHTERING AND MEAT INSPECTION.

The quarterly report upon the work of slaughtering and meat inspection from Oct. 1, 1913, to Dec. 31, 1913, inclusive, has been rendered to the State Board of Health by the inspectors of slaughtering in the various cities and towns throughout the Commonwealth. The result of these inspections may be found in the following tables showing the number and kinds of carcasses inspected, the condemnations of carcasses found unfit for food, the reasons for condemnation and the disposition of such carcasses.

Where a blank space appears it indicates the absence of a report having been rendered by the inspector of slaughtering for such city or town, or that an inspector of slaughtering has not been nominated by the local board of health, or has not been approved by the State Board of Health.

Quarterly Report on Slaughtering Inspection, Oct. 1–Dec. 31, 1913.

Cities and Towns.	Number of Cattle.	Number of Calves.	Number of Hogs.	Number of Sheep.	Number of Condemnations.	Reasons for Condemnation.	Disposition of Carcasses.
Abington,	1	29	206	–	2 hogs.	1 hog cholera, 1 dropsy.	2 rendered.
Acton,	834	223	17	–	15 cattle, 21 calves.	1 cancer, 1 milk fever, 13 tuberculosis, 21 immature.	15 rendered, 11 fed to hogs, 10 fed to hogs and hens.
Acushnet,	7	66	127	–	– –	– –	– –
Adams,	14	51	2	–	1 calf.	1 immature.	1 rendered.
Agawam,	–	–	–	–	– –	– –	– –
Alford,	13	1	13	26	– –	– –	– –
Amesbury,	4	25	58	–	– –	– –	– –
Amherst,	130	210	110	31	12 cattle, 17 calves, 4 hogs.	1 milk fever, 15 tuberculosis, 1 strangulation, 16 immature.	6 rendered, 27 buried.
Andover,	–	4	119	–	1 hog.	1 tuberculosis.	1 rendered.
Arlington,	–	375	–	–	– –	– –	– –

Ashburnham,	7	9	46	2	–	–	–
Ashby,	46	95	67	5	2 cattle, 4 hogs.	2 tuberculosis, 4 malnutrition.	6 rendered.
Ashfield,	40	1	81	1	1 cow.	1 tuberculosis.	1 rendered.
Ashland,	10	15	156	–	3 cattle, 10 hogs.	11 tuberculosis, 2 hog cholera.	13 rendered.
Athol,	63	17	158	61	9 cattle, 1 hog.	9 tuberculosis, 1 paralysis.	10 rendered.
Attleborough,	56	40	66	–	1 cow, 2 calves, 2 hogs.	1 pyæmia, 2 immature, 1 tuberculosis, 1 jaundice.	5 buried.
Auburn,	22	14	38	–	2 cattle.	2 tuberculosis.	2 rendered.
Avon,	–	–	–	–	–	–	–
Ayer,	–	–	5	–	–	–	–
Barnstable,	8	5	136	–	–	–	–
Barre,	12	4	73	15	–	–	–
Becket,	11	3	13	7	–	–	–
Bedford,	1	–	25	–	–	–	–
Belchertown,	22	96	130	–	–	–	–
Bellingham,	–	–	31	–	–	–	–
Belmont,	–	–	–	–	–	–	–
Berkley,	–	–	40	–	–	–	–
Berlin,	–	4	19	–	–	–	–
Bernardston,	14	5	34	14	–	–	–
BEVERLY,	–	–	–	–	–	–	–
Billerica,	41	74	34	–	8 calves.	8 immature.	8 rendered.
Blackstone,	–	–	–	–	–	–	–
Blandford,	21	13	84	8	1 cow.	1 tuberculosis.	1 buried.
Bolton,	–	–	61	–	–	–	–
Bourne,	2	4	65	–	1 hog.	1 inspector not present.	1 buried.
Boxborough,	–	–	–	–	–	–	–
Boxford,	–	–	32	–	–	–	–
Boylston,	12	57	66	1	–	–	–
Braintree,	12	111	124	2	–	–	–
Brewster,	2	17	20	–	–	–	–
Bridgewater,	5	2	151	–	–	–	–
Brimfield,	2	7	61	–	–	–	–
BROCKTON,	6	–	94	–	2 hogs.	1 tuberculosis, 1 pleurisy.	2 rendered.
Brookfield,	–	4	46	2	–	–	–
Brookline,	–	–	–	–	–	–	–
Buckland,	1	–	25	–	–	–	–
Burlington,	–	–	–	–	–	–	–

Quarterly Report on Slaughtering Inspection, Oct. 1–Dec. 31, 1913 — *Continued.*

Cities and Towns.	Number of Cattle.	Number of Calves.	Number of Hogs.	Number of Sheep.	Number of Condemnations.	Reasons for Condemnation.	Disposition of Carcasses.
CAMBRIDGE,	–	2,345	–	–	115 calves.	77 immature, 24 weak condition, 8 dysentery, 6 omphalitis.	115 rendered.
Canton,	–	–	63	–	– –	– –	– –
Carlisle,	18	46	20	–	– –	– –	– –
Carver,	–	2	7	–	– –	– –	– –
Charlemont,	18	3	46	21	– –	– –	– –
Charlton,	116	171	51	27	– –	– –	– –
Chatham,	–	1	85	–	1 calf, 1 boar.	1 emaciated, 1 tainted.	1 buried, 1 rendered.
Chelmsford,	166	126	318	80	2 cattle, 4 calves, 1 hog.	2 tuberculosis, 4 immature, 1 dead on arrival.	7 rendered.
CHELSEA,	–	–	–	–	– –	– –	– –
Cheshire,	10	5	24	–	– –	– –	– –
Chester,	12	10	35	17	1 cow.	1 tuberculosis.	1 buried.
Chesterfield,	8	19	62	–	– –	– –	– –
CHICOPEE,	2	2	187	–	1 hog.	1 tuberculosis.	1 buried.
Chilmark,	2	–	3	12	– –	– –	– –
Clarksburg,	13	5	22	–	– –	– –	– –
Clinton,	22	112	163	–	6 calves.	6 immature.	6 rendered.
Cohasset,	–	–	59	–	1 hog.	1 tuberculosis.	1 buried.
Colrain,	23	–	84	3	– –	– –	– –
Concord,	757	484	–	35	38 cattle, 47 calves.	38 tuberculosis, 47 immature.	85 rendered.
Conway,	–	–	–	–	– –	– –	– –
Cummington,	25	16	83	18	2 cattle.	2 tuberculosis.	2 buried.
Dalton,	17	3	75	4	– –	– –	– –
Dana,	3	6	49	5	– –	– –	– –
Danvers,	–	70	–	–	– –	– –	– –
Dartmouth,	3	158	217	–	8 calves, 2 hogs.	8 immature, 2 tuberculosis.	10 rendered.
Dedham,	2	155	198	–	5 hogs.	5 hog cholera.	5 rendered.
Deerfield,	15	11	83	10	– –	– –	– –
Dennis,	5	1	89	–	– –	– –	– –

Dighton,	76	118	68	–	–	–	–
Douglas,	1	15	28	–	–	–	–
Dover,	–	–	–	–	–	–	–
Dracut,	599	232	427	5	15 cattle, 17 calves, 15 hogs.	16 tuberculosis, 9 immature, 2 inspector not present, 3 injuries, 3 diarrhœa, 7 jaundice, 5 bitten by dogs, 2 hog cholera.	29 rendered, 18 buried.
Dudley,	60	67	108	–	2 cattle.	2 tuberculosis.	2 buried.
Dunstable,	–	–	11	–	–	–	–
Duxbury,	1	–	89	–	–	–	–
East Bridgewater,	4	99	59	–	–	–	–
East Longmeadow,	4	6	78	–	–	–	–
Eastham,	4	8	41	–	–	–	–
Easthampton,	21	218	94	–	1 cow, 3 hogs.	4 tuberculosis.	3 rendered, 1 burned.
Easton,	46	97	18	–	–	–	–
Edgartown,	16	6	93	13	–	–	–
Egremont,	36	–	112	59	–	–	–
Enfield,	–	154	64	–	–	–	–
Erving,	6	5	16	–	–	–	–
Essex,	–	–	–	–	–	–	–
EVERETT,	–	–	–	–	–	–	–
Fairhaven,	169	148	23	5	4 cattle, 8 calves.	4 tuberculosis, 8 immature.	12 rendered.
FALL RIVER,	–	–	4	–	–	–	–
Falmouth,	–	–	28	–	–	–	–
FITCHBURG,	227	208	119	–	2 cattle, 1 calf.	2 tuberculosis, 1 immature.	3 rendered.
Florida,	1	–	12	–	–	–	–
Foxborough,	3	11	25	–	–	–	–
Framingham,	107	212	15	–	5 cattle, 8 calves.	4 tuberculosis, 1 anæmia, 8 immature.	13 rendered.
Franklin,	–	8	123	–	1 hog.	1 tuberculosis.	1 buried.
Freetown,	–	5	45	–	–	–	–
Gardner,	–	–	–	–	–	–	–
Gay Head,	–	–	–	–	–	–	–
Georgetown,	–	1	3	–	–	–	–

QUARTERLY REPORT ON SLAUGHTERING INSPECTION, OCT. 1–DEC. 31, 1913 — *Continued.*

CITIES AND TOWNS.	Number of Cattle.	Number of Calves.	Number of Hogs.	Number of Sheep.	Number of Condemnations.	Reasons for Condemnation.	Disposition of Carcasses.
Gill,	14	21	68	36	–	–	–
GLOUCESTER,	5	32	102	–	6 calves.	6 immature.	6 rendered.
Goshen,	2	12	9	–	–	–	–
Gosnold,	2	–	10	12	–	–	–
Grafton,	–	–	–	–	–	–	–
Granby,	160	223	57	5	3 cattle.	1 tuberculosis, 1 internal hemorrhage, 1 emaciated.	1 buried, 2 rendered.
Granville,	4	19	93	14	–	–	–
Great Barrington,	11	8	67	4	–	–	–
Greenfield,	34	80	108	191	3 calves.	1 anæmia, 2 immature.	3 rendered.
Greenwich,	13	31	40	4	–	–	–
Groton,	–	15	94	–	–	–	–
Groveland,	–	3	37	4	–	–	–
Hadley,	2	1	44	4	–	–	–
Halifax,	–	–	4	–	–	–	–
Hamilton,	–	–	–	–	–	–	–
Hampden,	–	52	21	–	–	–	–
Hancock,	3	6	2	58	–	–	–
Hanover,	–	11	26	9	2 hogs.	1 pneumonia, 1 hepatitis.	1 buried, 1 burned.
Hanson,	–	2	81	–	–	–	–
Hardwick,	31	23	162	8	–	–	–
Harvard,	6	123	109	1	2 calves, 1 hog.	2 immature, 1 tuberculosis.	1 fed to hens, 2 buried.
Harwich,	8	1	21	–	–	–	–
Hatfield,	8	22	171	–	4 cattle.	4 tuberculosis.	4 rendered.
HAVERHILL,	2	11	4	–	–	–	–
Hawley,	10	1	26	4	–	–	–
Heath,	9	5	45	–	–	–	–
Hingham,	–	–	86	–	–	–	–
Hinsdale,	6	6	9	–	–	–	–
Holbrook,	–	–	–	–	–	–	–
Holden,	23	69	93	–	–	–	–
Holland,	–	–	–	–	–	–	–

Holliston,	35	59	65	–	1 hog.	1 tuberculosis.	1 rendered.
HOLYOKE,	1	2	28	–	–	–	–
Hopedale,	–	–	–	–	–	–	–
Hopkinton,	–	4	42	–	1 hog.	1 tuberculosis.	1 buried.
Hubbardston,	11	23	52	2	1 hog.	1 tuberculosis.	1 buried.
Hudson,	–	2	67	–	–	–	–
Hull,	–	–	3	–	–	–	–
Huntington,	13	18	50	53	–	–	–
Ipswich,	3	–	83	–	–	–	–
Kingston,	1	3	32	–	2 hogs.	2 tuberculosis.	2 rendered.
Lakeville,	–	2	41	–	–	–	–
Lancaster,	–	–	77	–	–	–	–
Lanesborough,	–	–	–	–	–	–	–
LAWRENCE,	47	45	247	–	1 cow, 3 hogs.	3 tuberculosis, 1 hernia.	4 rendered.
Lee,	37	22	51	–	2 cattle.	2 tuberculosis.	2 buried.
Leicester,	11	96	37	–	1 cow, 1 hog.	1 tuberculosis, 1 hog cholera.	2 rendered.
Lenox,	93	4	95	82	–	–	–
Leominster,	41	116	89	10	6 cattle, 5 calves, 2 hogs.	8 tuberculosis, 5 immature.	13 rendered.
Leverett,	3	–	28	–	–	–	–
Lexington,	56	1,186	972	1	22 calves, 1 hog.	10 immature, 12 bruised, 1 pneumonia.	10 fed to hens, 8 buried, 5 rendered.
Leyden,	3	4	13	21	–	–	–
Lincoln,	32	82	368	24	5 calves.	5 immature.	5 buried.
Littleton,	–	–	–	–	–	–	–
Longmeadow,	–	1	7	–	1 hog.	1 tuberculosis.	1 rendered.
LOWELL,	–	–	180	–	1 hog.	1 tuberculosis.	1 rendered.
Ludlow,	2	129	44	–	1 hog.	1 tuberculosis.	1 buried.
Lunenburg,	91	137	209	–	1 cow, 1 hog.	2 tuberculosis.	2 rendered.
LYNN,	216	101	114	–	6 calves, 6 hogs.	6 immature, 5 tuberculosis, 1 pneumonia.	12 rendered.
Lynnfield,	288	91	18	–	5 cattle, 4 calves.	5 tuberculosis, 4 immature.	9 rendered.
MALDEN,	–	–	–	–	–	–	–
Manchester,	–	–	–	–	–	–	–
Mansfield,	13	10	189	22	1 hog.	1 jaundice.	1 rendered.

Quarterly Report on Slaughtering Inspection, Oct. 1–Dec. 31, 1913 — *Continued.*

Cities and Towns.	Number of Cattle.	Number of Calves.	Number of Hogs.	Number of Sheep.	Number of Condemnations.	Reasons for Condemnation.	Disposition of Carcasses.
Marblehead,	–	–	54	–	– –	– –	– –
Marion,	–	1	94	–	– –	– –	– –
MARLBOROUGH,	7	25	161	5	1 calf.	1 tuberculosis.	1 rendered.
Marshfield,	2	2	37	–	– –	– –	– –
Mashpee,	–	–	–	–	– –	– –	– –
Mattapoisett,	–	4	213	1	– –	– –	– –
Maynard,	19	121	103	–	1 cow, 2 hogs.	1 milk fever, 1 tuberculosis, 1 hog cholera.	2 rendered, 1 buried.
Medfield,	–	1	31	–	– –	– –	– –
MEDFORD,	–	–	–	–	– –	– –	– –
Medway,	79	247	46	2	1 cow.	1 tuberculosis.	1 rendered.
MELROSE,	–	–	87	–	3 hogs.	2 tuberculosis, 1 hog cholera.	2 rendered, 1 buried.
Mendon,	–	–	–	–	– –	– –	– –
Merrimac,	–	–	–	–	– –	– –	– –
Methuen,	–	–	–	–	– –	– –	– –
Middleborough,	73	43	156	–	1 hog.	1 tuberculosis.	1 rendered.
Middlefield,	–	–	–	–	– –	– –	– –
Middleton,	–	–	41	–	– –	– –	– –
Milford,	68	128	198	–	3 cattle, 7 calves, 1 hog.	3 tuberculosis, 7 immature, 1 hog cholera.	5 rendered, 6 buried.
Millbury,	–	–	–	–	– –	– –	– –
Millis,	34	25	6	–	– –	– –	– –
Milton,	–	–	25	20	– –	– –	– –
Monroe,	–	–	–	–	– –	– –	– –
Monson,	6	74	77	–	3 calves.	3 immature.	3 owner took back.
Montague,	14	11	47	–	1 boar.	1 tainted.	1 owner took back.
Monterey,	19	42	80	–	1 cow.	1 tuberculosis.	1 buried.
Montgomery,	12	46	28	–	– –	– –	– –
Mount Washington,	–	–	–	–	– –	– –	– –
Nahant,	–	–	–	–	– –	– –	– –
Nantucket,	2	11	124	8	– –	– –	– –
Natick,	–	2	4	–	– –	– –	– –
Needham,	–	–	–	–	– –	– –	– –

New Ashford, . .	2	1	11	2	– –	– –	– –
New Bedford, . .	88	117	222	12	7 cattle, 1 calf, 1 hog.	7 tuberculosis, 1 immature, 1 jaundice.	9 rendered.
New Braintree, . .	34	106	6	–	– –	– –	– –
New Marlborough, . .	23	2	7	34	1 cow.	1 tuberculosis.	1 buried.
New Salem, . . .	6	14	99	–	– –	– –	– –
Newbury, . . .	25	173	94	5	1 cow, 8 calves, 2 hogs.	1 tuberculosis, 8 immature, 2 hog cholera.	10 rendered, 1 buried.
Newburyport, . .	105	128	102	–	1 cow, 2 calves.	1 tuberculosis, 2 immature.	3 rendered.
Newton, . . .	–	–	3	–	– –	– –	– –
Norfolk, . . .	4	–	29	–	– –	– –	– –
North Adams, . .	263	79	132	49	5 cattle, 1 calf.	5 tuberculosis, 1 immature.	6 rendered.
North Andover, . .	2	–	31	–	– –	– –	– –
North Attleborough, .	48	61	87	–	3 cattle, 1 calf.	3 tuberculosis, 1 enteritis.	4 buried.
North Brookfield, . .	2	4	74	–	– –	– –	– –
North Reading, . .	–	–	84	–	1 hog.	1 tuberculosis.	1 rendered.
Northampton, . .	83	122	149	–	5 cattle, 2 hogs.	6 tuberculosis, 1 hog cholera.	7 rendered.
Northborough, . .	–	10	13	3	– –	– –	– –
Northbridge, . . .	2	1	20	–	– –	– –	– –
Northfield, . . .	9	8	63	15	4 hogs.	4 tuberculosis.	3 rendered, 1 buried.
Norton, ...	–	1	18	–	– –	– –	– –
Norwell, . . .	1	1	116	–	1 hog.	1 hog cholera.	1 buried.
Norwood, . . .	–	24	62	4	– –	– –	– –
Oak Bluffs, . . .	–	–	–	–	– –	– –	– –
Oakham, . . .	1	14	7	–	– –	– –	– –
Orange, ...	43	55	118	–	3 cattle, 2 hogs.	4 tuberculosis, 1 septicæmia.	5 buried.
Orleans, . . .	6	2	50	–	– –	– –	– –
Otis, ...	25	7	23	10	1 cow.	1 tuberculosis.	1 buried.
Oxford, ...	3	4	49	2	– –	– –	– –
Palmer, ...	104	47	105	10	1 cow, 2 calves, 1 hog.	2 tuberculosis, 2 immature.	2 rendered, 1 compost, 1 fed to hens.
Paxton, ...	7	28	6	–	– –	– –	– –
Peabody, . . .	280	252	429	39	4 cattle, 8 calves, 19 hogs, 2 sheep.	6 tuberculosis, 8 immature, 17 hog cholera, 2 killed by dogs.	31 rendered, 2 owner took back.

QUARTERLY REPORT ON SLAUGHTERING INSPECTION, OCT. 1–DEC. 31, 1913 — *Continued.*

CITIES AND TOWNS.	Number of Cattle.	Number of Calves.	Number of Hogs.	Number of Sheep.	Number of Condemnations.	Reasons for Condemnation.	Disposition of Carcasses.
Pelham,	–	4	7	–	–	–	–
Pembroke,	2	11	54	–	1 cow.	1 tuberculosis.	1 buried.
Pepperell,	9	66	63	1	1 cow, 2 calves.	1 tuberculosis, 2 immature.	3 buried.
Peru,	–	2	2	–	–	–	–
Petersham,	6	5	82	7	–	–	–
Phillipston,	10	2	29	–	–	–	–
PITTSFIELD,	94	41	76	23	2 cattle.	2 tuberculosis.	2 buried.
Plainfield,	8	20	65	8	–	–	–
Plainville,	–	–	11	–	–	–	–
Plymouth,	66	10	127	4	1 cow.	1 tuberculosis.	1 rendered.
Plympton,	–	–	10	–	–	–	–
Prescott,	–	–	3	–	–	–	–
Princeton,	10	24	47	–	–	–	–
Provincetown,	–	2	66	–	–	–	–
QUINCY,	–	–	–	–	–	–	–
Randolph,	1	–	26	–	1 hog.	1 tuberculosis.	1 buried.
Raynham,	4	14	15	–	–	–	–
Reading,	219	49	201	–	5 cattle, 7 hogs.	3 tuberculosis, 2 bruised, 6 improperly prepared, 1 emaciated.	12 rendered.
Rehoboth,	99	347	154	–	–	–	–
Revere,	–	–	–	–	–	–	–
Richmond,	17	2	49	44	1 cow.	1 tuberculosis.	1 rendered.
Rochester,	10	79	158	–	–	–	–
Rockland,	–	–	–	–	–	–	–
Rockport,	4	13	12	–	–	–	–
Rowe,	4	–	16	37	–	–	–
Rowley,	21	68	68	–	1 cow.	1 tuberculosis.	1 rendered.
Royalston,	12	14	48	23	–	–	–
Russell,	2	3	34	–	–	–	–
Rutland,	25	87	42	–	–	–	–

SALEM,	–	–	–	–	–	–	–
Salisbury,	–	–	–	–	–	–	–
Sandisfield,	34	3	31	11	–	–	–
Sandwich,	5	–	45	–	–	–	–
Saugus,	–	2	22	–	–	–	–
Savoy,	–	–	–	–	–	–	–
Scituate,	1	1	5	–	–	–	–
Seekonk,	4	1	111	–	3 hogs.	2 enteritis, 1 hog cholera.	2 buried, 1 rendered.
Sharon,	–	1	5	–	–	–	–
Sheffield,	38	12	141	72	1 cow.	1 tuberculosis.	1 buried.
Shelburne,	75	34	156	93	6 cattle.	3 tuberculosis, 1 emaciated, 1 cirrhosis, 1 difficult parturition.	6 rendered.
Sherborn,	2	13	49	–	–	–	–
Shirley,	1	–	22	–	–	–	–
Shrewsbury,	29	239	155	4	3 cattle, 2 hogs.	5 tuberculosis.	5 rendered.
Shutesbury,	–	5	18	–	–	–	–
Somerset,	18	4	88	–	1 cow.	1 bruised.	1 rendered.
SOMERVILLE,	–	–	310	–	3 hogs.	3 hog cholera.	3 rendered.
South Hadley,	15	81	163	–	–	–	–
Southampton,	64	52	93	–	–	–	–
Southborough,	–	–	–	–	–	–	–
Southbridge,	28	21	66	–	–	–	–
Southwick,	10	35	95	10	–	–	–
Spencer,	14	26	51	1	–	–	–
SPRINGFIELD,	–	133	24	18	2 calves.	2 immature.	2 rendered.
Sterling,	–	–	–	–	–	–	–
Stockbridge,	–	–	–	–	–	–	–
Stoneham,	–	1	68	–	2 hogs.	1 tuberculosis, 1 cirrhosis.	2 rendered.
Stoughton,	11	35	16	–	–	–	–
Stow,	–	–	2	–	–	–	–
Sturbridge,	186	230	102	8	4 calves.	4 immature.	4 buried.
Sudbury,	1	1	6	–	–	–	–
Sunderland,	4	14	25	–	–	–	–
Sutton,	26	134	44	–	–	–	–
Swampscott,	–	–	–	–	–	–	–
Swansea,	148	97	87	32	7 cattle.	7 tuberculosis.	7 rendered.
TAUNTON,	64	35	348	–	2 hogs.	2 tuberculosis.	2 rendered.
Templeton,	12	14	78	–	1 hog.	1 pneumonia.	1 rendered.
Tewksbury,	181	111	171	2	3 cattle, 8 calves.	1 pneumonia, 2 died, 8 immature.	9 rendered, 2 buried.

QUARTERLY REPORT ON SLAUGHTERING INSPECTION, OCT. 1–DEC. 31, 1913 — *Concluded.*

CITIES AND TOWNS.	Number of Cattle.	Number of Calves.	Number of Hogs.	Number of Sheep.	Number of Condemnations.	Reasons for Condemnation.	Disposition of Carcasses.
Tisbury,	–	–	–	–	– –	– –	– –
Tolland,	5	5	41	–	– –	– –	– –
Topsfield,	–	34	60	873	2 calves.	2 immature.	2 rendered.
Townsend,	20	23	51	–	2 cattle.	2 tuberculosis.	2 rendered.
Truro,	5	–	34	–	– –	– –	– –
Tyngsborough,	1	–	14	–	– –	– –	– –
Tyringham,	9	3	50	–	– –	– –	– –
Upton,	4	13	11	16	– –	– –	– –
Uxbridge,	13	4	100	5	– –	– –	– –
Wakefield,	–	–	222	–	3 hogs.	1 hog cholera, 1 tumor, 1 erysipelas.	3 rendered.
Wales,	–	–	–	–	– –	– –	– –
Walpole,	1	–	136	–	2 hogs.	2 jaundice.	2 buried.
WALTHAM,	–	–	29	–	– –	– –	– –
Ware,	–	–	–	–	– –	– –	– –
Wareham,	–	3	162	6	1 hog.	1 tuberculosis.	1 rendered.
Warren,	17	11	107	14	1 cow.	1 tuberculosis.	1 buried.
Warwick,	3	2	47	1	– –	– –	– –
Washington,	5	26	13	3	– –	– –	– –
Watertown,	–	–	–	–	– –	– –	– –
Wayland,	–	1	66	–	1 hog.	1 hog cholera.	1 rendered.
Webster,	2	21	96	–	1 hog.	1 hog cholera.	1 rendered.
Wellesley,	–	–	–	–	– –	– –	– –
Wellfleet,	9	1	24	–	– –	– –	– –
Wendell,	4	6	18	11	– –	– –	– –
Wenham,	–	–	–	–	– –	– –	– –
West Boylston,	4	5	22	–	– –	– –	– –
West Bridgewater,	3	115	203	3	1 cow, 14 calves, 1 sheep.	1 tuberculosis, 14 immature, 1 bitten by dog.	1 buried, 15 rendered.
West Brookfield,	5	15	34	–	– –	– –	– –
West Newbury,	–	–	–	–	– –	– –	– –
West Springfield,	–	1	23	–	– –	– –	– –
West Stockbridge,	3	20	27	5	– –	– –	– –

West Tisbury,	8	5	1	93	–	–	–
Westborough,	1	7	39	–	1 cow.	1 difficult parturition.	1 rendered.
Westfield,	16	6	103	–	–	–	–
Westford,	13	183	119	3	3 calves.	3 immature.	3 rendered.
Westhampton,	11	33	34	–	–	–	–
Westminster,	–	7	19	–	–	–	–
Weston,	28	245	123	–	1 cow, 29 calves, 15 hogs.	1 tuberculosis, 29 immature, 14 measles, 1 cancer.	39 rendered, 6 buried.
Westport,	186	155	340	43	3 cattle, 2 calves.	2 tuberculosis, 1 abuse and exhaustion, 2 immature.	3 rendered, 2 destroyed by acid.
Westwood,	–	–	–	–	–	–	–
Weymouth,	–	–	–	–	–	–	–
Whately,	–	–	–	–	–	–	–
Whitman,	–	–	1	–	–	–	–
Wilbraham,	21	10	13	–	–	–	–
Williamsburg,	6	17	46	–	2 hogs.	2 tainted.	2 buried.
Williamstown,	61	161	279	555	–	–	–
Wilmington,	18	103	343	–	6 calves, 11 hogs.	4 immature, 2 emaciated, 11 hog cholera.	17 rendered.
Winchendon,	13	6	72	2	1 calf, 1 hog.	1 immature, 1 tuberculosis.	2 burned.
Winchester,	–	–	–	–	–	–	–
Windsor,	11	10	22	8	–	–	–
Winthrop,	–	–	–	–	–	–	–
WOBURN,	–	22	2,015	–	5 hogs.	5 tuberculosis.	5 rendered.
WORCESTER,	796	459	540	14	14 cattle, 20 calves, 4 hogs.	13 tuberculosis, 1 unstamped, 20 immature, 4 hog cholera.	38 rendered.
Worthington,	6	23	80	10	–	–	–
Wrentham,	–	2	46	–	1 hog.	1 abscesses of liver.	1 buried.
Yarmouth,	1	–	54	–	–	–	–

In addition to the above, 2 goats and 2 boars were inspected in the towns of Chelmsford, Dracut, Chatham and Montague.

SUMMARY.

Total number of carcasses inspected,			53,917
(*a*) Cattle,	9,791		
(*b*) Calves,	15,875		
(*c*) Hogs,	24,905		
(*d*) Sheep,	3,342		
(*e*) Goats,	2		
(*f*) Boars,	2		
Total number of carcasses passed,			53,042
Total number of carcasses condemned,			875
(*a*) Cattle,	236		
(*b*) Calves,	444		
(*c*) Hogs,	190		
(*d*) Sheep,	3		
(*e*) Boars,	2		
Reasons for condemnation: —			
(*a*) Tuberculosis,		287	
Cattle,	215		
Calf,	1		
Hogs,	71		
(*b*) Immature,		379	
Calves,	379		
(*c*) Hog cholera,		57	
Hogs,	57		
(*d*) Septicæmia,		1	
Cow,	1		
(*e*) Pneumonia,		5	
Cow,	1		
Hogs,	4		
(*f*) Omphalitis,		6	
Calves,	6		
(*g*) Enteritis,		3	
Calf,	1		
Hogs,	2		
(*h*) Cirrhosis,		2	
Cow,	1		
Hog,	1		

Reasons for condemnation — *Continued.*		
(*i*) Pyæmia,		1
Cow,	1	
(*j*) Anæmia,		2
Cow,	1	
Calf,	1	
(*k*) Jaundice,		12
Hogs,	12	
(*l*) Erysipelas,		1
Hog,	1	
(*m*) Measles,		14
Hogs,	14	
(*n*) Dysentery,		8
Calves,	8	
(*o*) Diarrhœa,		3
Calves,	3	
(*p*) Pleurisy,		1
Hog,	1	
(*q*) Dropsy,		1
Hog,	1	
(*r*) Hepatitis,		1
Hog,	1	
(*s*) Paralysis,		1
Hog,	1	
(*t*) Hernia,		1
Hog,	1	
(*u*) Cancer,		2
Cow,	1	
Hog,	1	
(*v*) Tumor,		1
Hog,	1	
(*w*) Internal hemorrhage,		1
Cow,	1	
(*x*) Milk fever,		3
Cattle,	3	
(*y*) Emaciated,		6
Cattle,	2	
Calves,	3	
Hog,	1	

Reasons for condemnation — *Concluded*			
(*z*) Malnutrition,		4	
Hogs,	4		
(*aa*) Difficult parturition,		2	
Cattle,	2		
(*bb*) Abuse and exhaustion,		1	
Cow,	1		
(*cc*) Abscesses of liver,		1	
Hog,	1		
(*dd*) Strangulation,		1	
Calf,	1		
(*ee*) Tainted,		4	
Hogs,	2		
Boars,	2		
(*ff*) Bruised,		15	
Cattle,	3		
Calves,	12		
(*gg*) Injured,		3	
Calves,	3		
(*hh*) Weak condition,		24	
Calves,	24		
(*ii*) Died,		2	
Cattle,	2		
(*jj*) Killed by dogs,		2	
Sheep,	2		
(*kk*) Bitten by dogs,		6	
Hogs,	5		
Sheep,	1		
(*ll*) Dead on arrival,		1	
Hog,	1		
(*mm*) Improperly prepared,		6	
Hogs,	6		
(*nn*) Unstamped,		1	
Cow,	1		
(*oo*) Inspector not present,		3	
Calves,	2		
Hog,	1		
Total number of reasons for condemnation,			41

Disposition of condemned carcasses: —			
(*a*) Rendered,		694	
Cattle,	199		
Calves,	352		
Hogs,	141		
Sheep,	1		
Boar,	1		
(*b*) Buried,		135	
Cattle,	37		
Calves,	52		
Hogs,	46		
(*c*) Fed to hogs,		11	
Calves,	11		
(*d*) Fed to hens,		12	
Calves,	12		
(*e*) Fed to hogs and hens,		10	
Calves,	10		
(*f*) Burned,		4	
Calf,	1		
Hogs,	3		
(*g*) Compost,		1	
Calf,	1		
(*h*) Destroyed by acid,		2	
Calves,	2		
(*i*) Owner took back,		6	
Calves,	3		
Sheep,	2		
Boar,	1		
Total number of dispositions of carcasses,			9

The following cities and towns reporting upon the work of inspection rendered "Nothing to report:" —

Boxborough,
Brookline,
Burlington,
Dover,
Everett,
Holbrook,
Malden,
Quincy,
Salem,
Swampscott,
Tisbury,
Winthrop.

During October, November and December, 1913, it was found necessary to condemn and destroy the following meats on account of illegal slaughtering.

The following table shows the kind of carcasses confiscated, the number of pounds in each confiscation, the reasons, and the disposition of the same: —

DATE.	Articles.	Weight (Pounds).	Reasons.	Dispositions.
Oct. 1, 1913	Pork, . .	790	Uninspected and unstamped	Rendered
Oct. 2, 1913	Beef, . .	302	Uninspected and unstamped	Rendered
Oct. 6, 1913	Veal, . .	192	Uninspected and unstamped	Rendered
Oct. 8, 1913	Pork, . .	169	Uninspected and unstamped	Rendered
Oct. 18, 1913	Beef, . .	500	Uninspected and unstamped	Rendered
Nov. 3, 1913	Veal, . .	41	Uninspected and unstamped	Rendered
Dec. 10, 1913	Beef, . .	200	Uninspected and unstamped	Rendered
Dec. 11, 1913	Beef, . .	250	Uninspected and unstamped	Rendered
Total, .	. . .	2,444		

During the months of December, 1913, and January, 1914, the following convictions were secured because the inspector was not present at the time of slaughter, and the meat was unstamped: —

No.	DATE.	Name of Defendant.	Place.	Result.
1	Dec. 16, 1913	Charles F. Silloway, ...	Newburyport, .	Fined.
2	Dec. 16, 1913	Jacob Abramson, . . .	Newburyport, .	Case filed.
3	Dec. 24, 1913	Charles J. Bleiler, . . .	Watertown, .	Case filed.
4	Jan. 24, 1914	Joe Woloch, ...	Dracut, . .	Fined.[1]
5	Jan. 26, 1914	E. McAllister, ...	Winchendon, .	Fined.[1]
6	Jan. 26, 1914	Nardini Adamo, . . .	Winchendon, .	Fined.

[1] Appealed.

In addition to the above, Arthur Dakin of Sudbury was found guilty of selling the carcass of a cow for food which had come to its death otherwise than by slaughter. He was fined and appealed.

Also, John Abare of Winchendon was found guilty of having meat in his possession which was uninspected. He was fined and appealed.

Total amount of fines imposed, $130.

REPORT ON INSPECTION OF DAIRIES.

During the month of January, 1914, 303 dairies were examined in the following places: —

Place.	Number examined.	Class AA.	Class A.	Class B.	Unclean Dairies.	Per Cent. Clean Dairies.
Andover,	21	–	–	19	2	90.48
Brimfield,	23	–	2	21	–	100.00
Charlton,	55	–	5	39	11	80.00
Leicester,	17	–	–	14	3	82.35
Millbury,	39	–	2	27	10	74.36
Oxford,	16	–	1	14	1	93.75
Spencer,	41	1	2	35	3	92.68
Sutton,	51	–	1	41	9	82.35
Warren,	40	1	–	39	–	100.00

Total number of dairies examined,	303
Total number of commendable dairies,	264
Total number of unclean dairies,	39
Percentage of dairies which passed inspection,	87.13

In addition to the above, 94 dairies were visited at which the sale of milk had been discontinued, 3 of which are making butter; also, 34 dairies were reported as producing less than 20 quarts of milk a day.

Included in the total number of dairies visited were 97 which had recently started in the milk-producing business and were inspected for the first time.

The names of the owners of the dairies found to be worthy of commendation follow: —

ANDOVER.

Class B.

	Per Cent.
Abbott, Freeman,	64
Abbott, James,	69
Abbott, Margaret E.,	67
Averill, George,	67
Belisle, Louis A.,	64
Bourdelais, Joe,	61
Carter, George M.,	62
Corliss, W. B.,	65
Curtis, A. F. & W. E.,	68
Downing, (Mrs.) J. J.,	62
Eames, H. M.,	68
Fenton, H. L.,	63
Hacket, W. H.,	63
Harrington, D. F.,	60
Livingston, W. J.,	63
Smith, B. Frank,	62
Stone, C. A.,	63
Thompson, Andrew,	61
Watson, Robert,	68

BRIMFIELD.

Class A.

	Per Cent.
Filer, Charles H.,	78
Pearsall (Dr.) W. S.,	75

Class B.

Adams, Samuel H.,	65½
Booth, Elmer,	64
Booth, M. S.,	65½
Bradway, Elmer I.,	63
Bradway, Herbert J.,	71½
Burns, Mary E.,	65½
Clark, A. B.,	61
Compton, William,	72½
Goetze, M. E.,	66
Haley, Daniel,	68
Haley, John,	72½
Mulcare, Eugene,	61
Noble, J. H.,	63
Norcross, G. W.,	68
Parker, O. E.,	66½
Shanley, John,	70
Shaw, C. F.,	70
Sherman, George W.,	71½
Sherman, Merrick,	68½
Stearns, William,	65
Wells, (Miss) Anna M.,	73½

CHARLTON.

Class A.

Baldwin, F. M.,	77
Clark, Murray A.,	75½
Lamb, E. A.,	78
"Masonic Home,"	78
Wright, George M.,	82

Class B.

Aldrich, Thomas H.,	63
Baker, Fred E.,	66
Baker, Henry,	64
Blood, E. F.,	68
Bond, Carlis,	73
Capen, L. M.,	69
Carrington, Joseph,	71½
Cleveland, Fred,	64
Davis, Henry K.,	73½
Davis, Sylvanus,	61½
Dodge, H. M.,	64½
Fitzgerald, George,	73
Fitzgerald, James,	68
French, G. J.,	60½
Gillespie, William S.,	70
Gustafson, William,	70
Hammond, F. R.,	69
Hammond, John G.,	64½
Hammond, Stephen,	65
Harrington, Warren J.,	67½
Hitchcock, Homer S.,	70
Hodgerney, C. O.,	65½
Lamoureux, Clement,	65
Mahan, Morris J.,	71½
Mann, J. J.,	66
McIntyre, Lewis A.,	68½
McKeon, Michael,	62½
Nelson, Frank A.,	62½
Nielsen, Lauritz,	63
Phillips, Everett C.,	68
Prunier, Frank,	62
Putnam, Justin M.,	69
Putnam, R. K.,	64
Stockman, F. E.,	72
Taylor, R. H.,	68½
"Town Farm,"	70
Tucker, George N.,	60
Wakefield, Frank O.,	65½
Watson, G. O.,	67½

LEICESTER.

Class B.

Barclay, B. F.,	70½
Barry, Jeremiah,	73
Bauder, Frank A.,	64
Davidson, George,	68½
Fouracre, J. A.,	70
Gagen, Stephen,	63
Hodgerney, F. I.,	70½
Horne, C. D.,	63½
Jacobson, Charles,	60
McKenzie, J. W.,	62
Smith, J. E.,	70
Takala, Herman,	62
Warren, Edward,	64½
Warren, S. Gleason,	70

MILLBURY.

Class A.

	Per Cent.
Carney, Everett N.,	82
Dolan, John,	76

Class B.

Adams, Henry B.,	62½
Alsing, L. J.,	69½
Bergstrom, John,	68
Blanchette, Hector,	67
Carlson & Stromberg,	68½
Carlstrom, Carl,	73
Carter, Henry W.,	65½
Dolan, Edward H.,	74
Geselius, Adolf,	72
Gilson, William J.,	62
Hairyes, Henry,	64
Halberg, Carl,	63½
Harris, W. A.,	64
Horne, W. E.,	61
Howe, I. E.,	63½
Jay, Herbert,	63
Jensen, L. C.,	63
Little, John,	64
Matson, Louis,	65½
McCracken & Paine,	69
McGrath, P.,	66
Miller, L. H.,	63
Rice, Fred H.,	72
Shepard, Charles W.,	63½
Stockwell, William H.,	62
Stowe, G. B.,	70½
Stowe, G. I.,	73

OXFORD.

Class A.

	Per Cent.
Lind, Gustave,	76½

Class B.

Allen, L. N.,	63
Benoit, Joseph H.,	63
Fay, Dayton M.,	60½
Hammond, R. J.,	68½
Hawes, Charles,	70
Hudson, Dayton,	69
Johnson, John,	65
Landin, Eric,	69
Malkowska, John,	65½
Pottle, James M.,	60
Sarkisian, Moses,	62
Vinton, Charles R.,	74
Welch, Claude,	61
Wellington, C. H.,	63

SPENCER.

Class AA.

	Per Cent.
Sagendorph, Arthur H.,	96

Class A.

Sagendorph, A. H.,	86
Wilson, George H.,	77½

Class B.

Arseneault, Theodore,	63
Bemis, Edson C.,	68
Bemis, (Mrs.) Mary A.,	65½
Bemis, Walter C.,	67½
Capen, W. E.,	70
Casey, William,	74
Casservan, Joseph,	70
Corey, James R.,	71½
Dufault, Oliver,	65
Eldredge, Edwin,	64½
Faure, Henry T.,	66
Finnegan, Thomas,	67½
Gray, J. J.,	66
Hebert, G. B.,	70½

Class B — Concluded.

	Per Cent.
Jacobson, Wilhelm,	60
Kittredge, E. E. & R. F.,	65
LaTowne, Napoleon,	65½
Leclair, Peter,	64
Leonard, C. P.,	63½
L'Heureux, Joseph,	74½
McCormack, Bernard,	65
Miller, Frank X.,	65½
Murray, Joseph,	69
Norcross, A. G.,	70
Parker, S. W.,	70½
Parker, W. O.,	67
Putnam, Austin G.,	69½
Richard, Pierre,	64
Sibley, W. H.,	64
Snay, Henry,	63½
Thibeault, Moses,	67
"Town Farm,"	70½
Williams, Edward,	67½
Wilson, (Mrs.) L. A.,	67
Wilson, Warren,	65

SUTTON.

Class A.

	Per Cent.
Manchaug Company Farm,	77

Class B.

Baarda, Frank,	60
Ballard, Joseph A.,	62
Barnes, G. H.,	71
Brigham, Dexter A.,	70
Clark, O. F.,	72½
Donaldson, E. W.,	62½
Eells, Edward,	63
Erickson, Anton (Estate),	64
Freeland, J. F.,	66
Gibree, Jerry,	64
Hartness, John Henry,	64
Harwood, Charles F.,	66
Hough, Charles A.,	62
Jacques, John C.,	65
Keigwin, (Mrs.) L. J.,	72
Keith, (Mrs.) G. A.,	60
Kupfer, Charles & George,	62
Malhoit, Louis N.,	67
Moo, John,	62
Moore, George M.,	73½
Moore, William H.,	60
Orn, August,	61
Petit, Joseph,	62
Perry, George N.,	63
Putnam, Charles W.,	63½
Putnam, (Miss) Etta,	64
Putnam, Henry Waters,	66
Putnam, Irving W.,	63½
Ray, Herbert L.,	62
Shaw, S. Martin,	64
Sherman, H. J.,	68
Smith, Channing W.,	65
Stockwell, George Lewis,	61
Stockwell, H. Scott,	65
Stockwell, Tyler,	64
Tell, Herman,	65½
"Town Farm,"	71
Wallace, Monroe,	66½
Wallace, Sumner,	60
Welch, David J.,	66
Wells, David,	71

WARREN.

Class AA.

	Per Cent.
Blair, James R.,	91

Class B.

	Per Cent.		Per Cent.
Ball, N. E.,	70½	O'Brien, (Mrs.) Timothy,	66½
Barnes & Ecker,	63½	O'Neil, Charles,	72½
Bliss, Calvin,	66½	Patrick, A. B. & J. B.,	70
Boyle, Robert H.,	65	Patrick, W. E.,	72
Brodeur, Alexander,	63½	Prindle, E. M.,	64½
Brodeur, Arthur,	65	Powers, W. H.,	69
Brodeur, William,	69½	Rice, E. E.,	66½
Cronin, Patrick,	64	Roth, W. J.,	67
Crowley, John,	66	Rubel, Martin,	63
Cutler, James T.,	65	Shepard, Herbert N.,	73
Cutler, (Mrs.) Lillie M.,	70	Sullivan, Bartholomew,	66
Day, William L.,	60½	Sullivan, Edward D.,	71
Delarge, Renie,	64	"Town Farm,"	74
Dexter, (Mrs.) Jennie S.,	66½	Van Wagner, Ralph,	67½
Haley, William T.,	74	Van Wagner, Royal,	68
Lyons, Dennis,	67	Waitt, G. E.,	69½
Lyons, Jeremiah,	72	Warriner, Alfred A.,	64½
Lyons, Patrick,	68	Williams, Everett E.,	73
Marshall, James T.,	66½	Williams, F. L.,	74½
McCrillis, Oren T.,	64½		

CLASSIFICATION OF DAIRIES.

AA = 90 to 100 per cent.
A = 75 to 90 per cent.
B = 60 to 75 per cent.
Below Class B (60 per cent.), unclean or dirty.

A SIMPLE AND EFFECTIVE METHOD FOR DISINFECTION OF TYPHOID STOOLS.[1]

By Harry Linenthal, M.D., Boston, State Inspector of Health and Assistant Physician to Outpatients, Massachusetts General Hospital, and Henry N. Jones, Bacteriologist to Massachusetts State Board of Health.

It is now a well-established fact that the immediate destruction of the typhoid organism in the excreta of the typhoid patient is one of the most important steps in the control of typhoid fever. Unfortunately, however, in the vast majority of cases of typhoid fever ill at their homes nothing that might reasonably be called efficient disinfection of stools is carried out.

One of us (H. L.) has had occasion at various times to investigate isolated cases of typhoid or outbreaks of the disease. The instances where he observed any procedure of what might be regarded as a serious effort to disinfect the stools were extremely rare. Only in a few communities in the State does the board of health issue any instructions when a case of typhoid is reported to them as to methods to be used in disinfection of the excreta. It is usually left to the attending physician to instruct the family in the matter. The methods usually in vogue consisted in sprinkling a little chloride of lime or sulpho-naphthol over the stool, which was promptly deposited in the water-closet or privy without being mixed or without letting it stand. Even in many instances where trained nurses were in attendance the procedure was not any more effective. The use of the disinfectants in such a perfunctory manner simply gives a false sense of security to the family and attendant. Not much need be said of how serious this situation becomes in communities where no public sewer exists and where the excreta are deposited in privy vaults accessible to flies, or, as often happens, when such privies are situated on some watershed.

The bedside disinfection of stools is not as simple a matter as it might appear. The proper utensils are often not available, and the treatment of the stool — the thorough mixing with the disinfectant and the necessary exposure of the stool to its action — will in the great majority of cases not be carried out even when detailed instructions are given. Moreover, it has been questioned whether the

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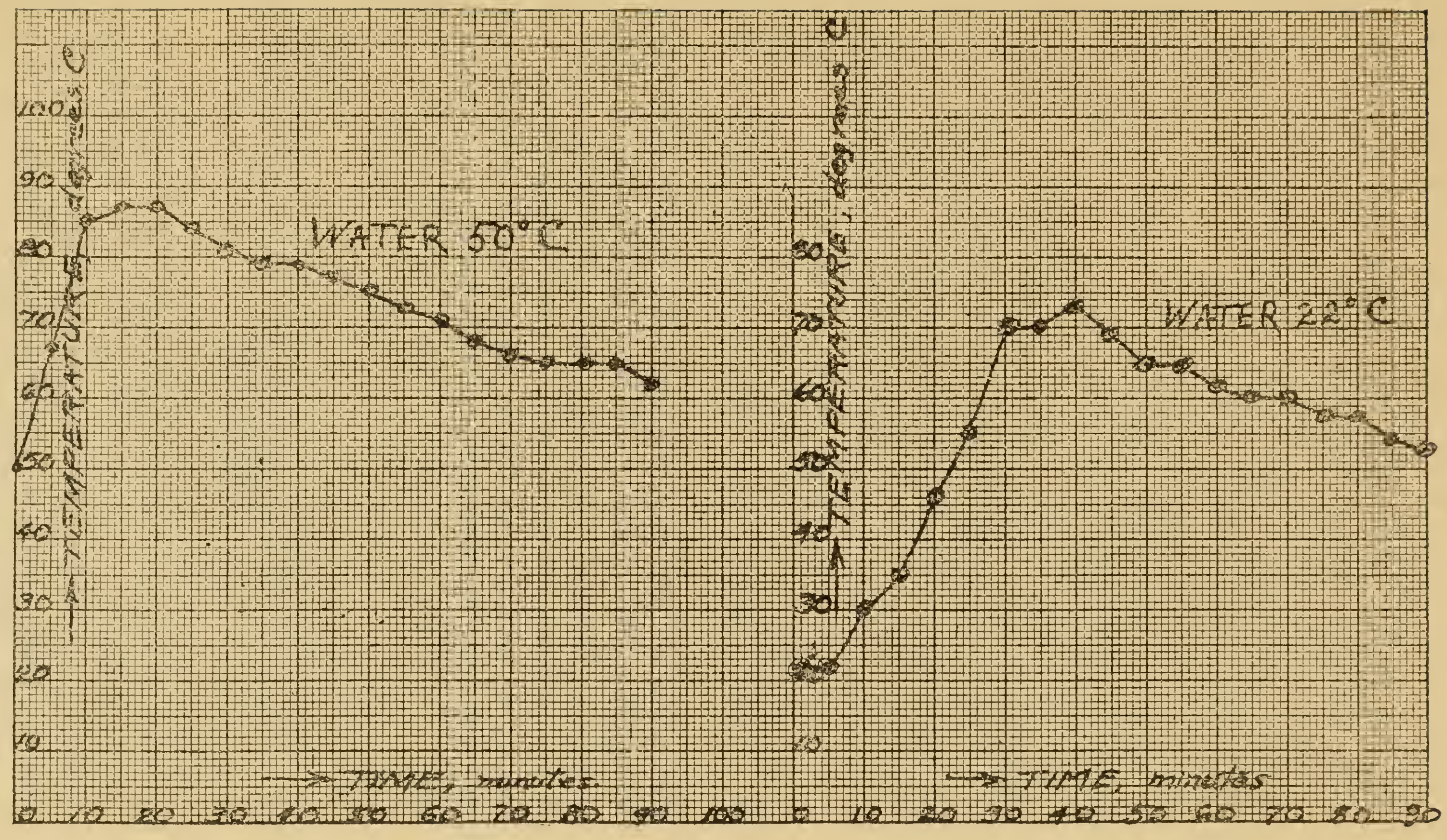
[1] Reprinted from the Boston Medical and Surgical Journal, Jan. 8, 1914.


WATER 50°C
TEMPERATURES, degrees C
100
90
80
70
60
50
40
30
20
10
→ TIME, minutes.
0
10
20
30
40
50
60
70
80
90
100
WATER 22°C
TEMPERATURE, degrees C
80
70
60
50
40
30
10
→ TIME, minutes
0
10
20
30
40
50
60
70
80
90

disinfectants as ordinarily recommended can be depended upon for thorough disinfection. Dr. Alvah H. Doty carried on experiments with the various disinfectants recommended for the purpose as they are usually employed. He found that at the end of twenty hours of exposure to the disinfectant but one-eighth of an inch of the fecal mass was disinfected. Heat — boiling water or steam — is the only effective way of dealing with typhoid discharges, but clearly the apparatus needed to do that is not available in households.

A method to disinfect typhoid discharges, to be both practical and effective, must be one which should require only such utensils which are available in every household, and must be so simple as to require little intelligent effort on the part of the attendant. Such a method was described by Dr. Prausnitz of Austria at the Fifteenth International Congress on Hygiene and Demography, held in Washington in September, 1912. The method was devised by Dr. A. M. Kaiser in the Hygienic Institute of Gratz University. It consists of adding enough hot water to cover the stool in the receptacle and then adding about one-fourth of the entire bulk of quicklime (calcium oxide), covering the receptacle and allowing it to stand for two hours. The hydration of the lime generates enough heat to destroy the typhoid organism.

We undertook to test out this method. In the first place, we set out to determine the quantity of heat generated and the length of time the heat is retained. To make the conditions as rigid as possible we used an ordinary tin pail with a loose-fitting cover. To a litre of cold water we added from 300 to 400 grams of ordinary commercial quicklime, and the temperature was observed. We found that the lime varied in its action, while in some experiments the temperature would rise to 80° or even to 90° in about ten minutes; in others it would take twenty minutes to one-half hour for the temperature to go up to 75° or over and maintain a temperature of over 60° for one and one-half hours. We found, however, in several observations that the temperature did not go above 55°, due undoubtedly to the poor quality of the lime, although it came from the same lot.

If, however, hot water was used, ranging in temperature from 50° to 65° C. it invariably rose to 75° or over in ten minutes, and in twenty minutes it reached 85° and often 90°, and a temperature was maintained over 60° for an hour and a half or longer. We found that the temperature was maintained for a longer period when an earthen vessel was used than in the tin vessel.

Of the many readings that we took using hot water we found that, starting ten minutes after the addition of the lime and continuing for one and a half hours, we got maximum temperatures of 90° and minimum temperatures of 58°. The average temperature for the hour and a half period, taking readings every five minutes, was in no case less than 74°.

The accompanying chart shows the temperature readings taken every five minutes for one and a half hours, (*a*) with water 50° C. and (*b*) cold water. These curves may be regarded as fairly typical.

It was clear, therefore, that this process generates enough heat to destroy the typhoid or any other organism, with the exception of spore bearers. The next question was as to whether the heat is sufficiently penetrating to destroy the organisms in the center of the fecal mass. To determine this we buried in the center of the fecal mass capillary tubes containing living typhoid organisms, distributed over the mass small lumps of lime, about 400 grams, and added enough water to cover the stool, and permitted the mixture to stand for one and a half hours. In all the experiments with the typhoid organisms cold water was used. The capillary tubes were then taken out and broken into a bouillon culture. No growth took place.

Conclusions.

The addition of about a cupful of commercial unslaked lime and water to a typhoid stool will generate enough heat to kill the typhoid organism. While cold water may often suffice, it cannot be depended upon, owing to the variable quality of the lime. Hot water from 50° to 60° C. will always give the desired results. The lime used should be in lumps, broken up in small pieces and distributed over the stool.

We believe that this is a simple, efficacious method and should take the place of the various methods now recommended by local boards of health.

THE REGISTRATION OF VITAL STATISTICS AND GOOD BUSINESS.[1]

By Louis I. Dublin, Ph.D., Statistician, Metropolitan Life Insurance Company, New York.

It is a most auspicious occasion that brings together the health officers and representative business and professional men of the State of Indiana to discuss health affairs. The subject of public health is no longer looked upon as exclusively within the province of the medical profession. This is a promising sign of the changing attitude of communities to what concerns them most vitally. Progressive health officers themselves recognize that their work is communal in character and that the success of their endeavors will depend largely upon the co-operation which they receive from the public at large, and, more especially, from the leaders of public opinion who determine the expenditure of public funds.

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[1] An address delivered at the public meeting of the Annual Conference of Health Officers of the State of Indiana, Indianapolis, May 13, 1913.

The medical men present will pardon my audacity if I still further indicate that the intrusion of lay minds and lay points of view is contributing very essential stimuli to the development of modern medicine. The contributions of the engineer, the educator, the statistician and the statesman to the field of preventive medicine have been of the greatest value. They have helped to extend the interest of medical science from the consideration of individual cases to the solution of broader communal problems. This process has, indeed, been carried to such a point that at a recent discussion by health officers it was seriously urged that much would be gained in the advancement of public health through the appointment of qualified non-medical officers for the enforcement and interpretation of sanitary regulations. This is not a proper occasion for the discussion of this question, but I refer to it only to indicate how appropriate it is for those who represent the other professions and activities in your communities to get together with the health authorities to-night to consider with them the many matters that vitally concern you.

The subject which your able State Secretary, Dr. Hurty, has suggested for my paper is "The Registration of Vital Statistics and Good Business." In the very title there is the implication that this phase of health administration is closely related to business affairs and can be tested by the same standards that are used daily to determine the value or lack of value of other industrial activities.

Statistics, in brief, is a system of accounting. The executive in industry and finance requires for the efficient administration of his business detailed analyses of the cost of production and distribution. Aside from the assistance which such statistics give him in the determination of a selling price for the product, they furnish him above all with a convenient method for checking the efficiency of his plant management. Cost accounting requires that each unit of raw material shall be traced through the factory in such manner that the value which every process adds to it is recorded. Through these accounts, the executive learns whether it is profitable to substitute machines for hand labor. He is also enabled to detect ill-advised applications of labor and wastefulness in the manipulation of materials. Such evils, unless immediately discovered, lead to inefficiency and the subsequent disorganization of an otherwise well-conducted enterprise.

The health officer of the community has a problem similar to that of the business manager in industry. He, too, must test the efficiency of his management. His raw materials are the human beings of his district. He must be able to trace the path of these individuals through life, from the date of their birth, through the years of their childhood to their maturity and marriage, until finally death terminates their record in the community's book of accounts. He must check up his methods of procedure in combating disease and must be in a position to determine whether the forces which he has applied are productive of results. He also should be immediately apprised of any new perils to the public health which may arise. If his administration is one of mere routine, handling details only, without inspiration and the force of directive ideas, then his community is on the road to civic inefficiency with all the disorganization that this implies.

It is the function of the vital statistician to provide the necessary data to the health officer for the settlement of these questions. He must know from year to year the composition and characteristics of the population. He must also have available an accurate record of the number of additions to the population by births and immigration, and of the number of deaths, marriages and divorces. Finally, he must know the number, location and intensity of the incidences of transmissible disease. Such, in brief, is the subject matter of vital statistics.

Let us now consider the intimate aspects of each of these subordinate fields of vital statistics.

COMPOSITION AND CHARACTERISTICS OF THE POPULATION.

Knowledge of the composition and characteristics of the population is fundamental for the vital statistician. It is to him what an inventory is to the industrial engineer. He must have at his disposal an enumeration by age, sex, race, nationality and marital condition and by such other characteristics as are indicated by the peculiar conditions prevailing in his community. The age distribution, for example, is vital to any intelligent consideration of the death rate. Newer communities where the proportion of infants is small often show a lower death rate than others with better health standards where the distribution of the component parts is more nearly normal. The distribution by sex is indicative of the extent to which a community is settled in its social and moral standards. Recently settled communities show a marked excess of males; it is only when the female element has attained its normal proportion that there come into evidence those characteristics of social and moral stability which are attributes of modern civilization. The race factor is important in determining the educational program of a community as well as in testing the prevailing mortality conditions. The nationalities composing a community outline the problem confronting social and philanthropic agencies whose work it is to help assimilate the alien and to adjust his condition harmoniously to the rest of the community. Information of this character, renewed every five years, should be of incalculable value in determining conditions of community life, and should serve as an index of progress or retrogression.

BIRTHS.

Births are the primary items of population income. They are interesting as to their actual number, an excess of births over deaths constituting the natural increment of population. From the number of births we derive birth rates, or the ratio between the number of births and the number of persons living. Nothing reflects better the vitality of a community than its birth rate. The associated factors of legitimacy, nationality and social position of parents throw light on the problem of national fecundity and indicate from which sources our population is being derived.

No phase of social hygiene has recently received more attention than the conservation of infant life. The movement has received great impetus since the establishment of the Children's Bureau in Washington under the direction of Miss Julia C. Lathrop. This organization has defined its first problem to be the determination of the birth and death rates of infants, but in this work it is hampered by the fact that in only eight States of the country are records kept with sufficient accuracy to justify any conclusions. Thousands of children are born annually in our country and are neither recorded at the time of their birth nor at their death, which in more than one-fifth of the cases occurs during their first year of life.

Legal considerations of the highest importance enter into the registration of births. Communities are waking up to their obligations to restrict child labor. Without adequate registration of births such regulation is hampered and the law often nullified in its effect. In this way, many children are deprived of education and are permitted to waste their limited energies in industrial pursuits, later to become the subjects of community relief. The transactions of life insurance companies frequently call for the legal proof of true age. Since the differences in premium charges vary with the age, it will be seen that the factor of age is essential to the determination of the amount of benefit which is to be paid at death. A case in point from the experience of the Metropolitan Life will be of interest. There is now in suit a case where the insured's age, according to the policy, was fifty years at the time of death; according to the health department register, the true age at death was seventy-two. In this case, if the transcript of the birth certificate could have been secured, it would very quickly have settled the question as to the true age at death. The insured was born in a foreign country, however, which had no better facilities for the registration of births than many States in our Union now have.

A case nearer home will also be of interest. A boy of thirteen, residing in Indiana, was insured with us in 1904 under one name, and his mother was designated as beneficiary under the policy. In March, 1913, he advised us that he had been insured under a wrong name, and that the relationship of the beneficiary as given was incorrect. In proof of the contention made we desired a certified copy of the birth record of the boy to establish his identity, but we were informed that no official birth record could be obtained, although the names in the case represented old and well-known families in the county. It would appear, therefore, that in this State the records of births were not kept with any degree of accuracy as recently as the year 1892. Some countries are more fortunate. Great Britain, Germany, France, Italy and Sweden have had a compulsory system of birth registration for many years. From these countries records of birth are obtained with the least expenditure of time and effort.

The establishment of personal identity often depends upon the validity of a birth record. Litigation in matters of property inheritance, the settlement of estates and the disposition of trusts, can in many instances be avoided when accurate birth records are at hand. Special problems in the morbid aspects of social life, such as the age of consent, the gravity of the offense in criminal cases, etc., depend upon efficient birth registration. Nor can we say just what social readjustments are necessary in dealing with the acute problem of illegitimacy, because we lack utterly information upon which to base an intelligent analysis of the situation.

Marriages.

The statistics of marriage are in close connection with birth statistics. Data of this nature are of value to investigators of community welfare. The marriage rate is in the nature of a barometer of a nation's prosperity. In countries where accurate marriage statistics have been kept the records show that periods of commercial prosperity have been marked with consistently high marriage rates, and those of depression with low rates. The physical and mental condition of the parties to marriages is also of vital importance to the State and should be made a matter of record. Evidences are already at hand that many of our social and even economic problems are caused by the mating of inferior stock. Alcoholics, the shiftless, imbeciles and criminals are permitted, through marriage, to aggravate our social problems by indiscriminate breeding and thereby perpetuate their like to act as even heavier burdens on future generations. In this country the students of eugenics have no accurate data to guide them in their endeavors for the improvement of our national race stock. Our neglect to provide intelligible birth and marriage statistics is a source of grave social loss, and I cannot urge too strongly your active participation in all efforts which will improve our statistics of these social facts.

The legal aspects of marriage registration are strikingly brought home to us in the life insurance business. Life insurance companies and other organizations administering trust funds are constantly involved in expensive litigation to establish the validity of claims arising out of defective or non-existent records of marriage. Questions sometimes arise as to the identity of wives named as beneficiaries in policy contracts. A typical case from our own experience will interest you. An unmarried lady was named in a policy of $10,000 as the beneficiary. After her subsequent marriage, she requested the Company to change the name entered upon the policy to the one she assumed at marriage. As is our uniform practice in such cases, we requested a certified copy of the marriage certificate, in order to protect the interests of all parties to the contract and avoid future litigation. Unfortunately, no certified record was obtainable, and we were obliged, with reluctance, to accept an affidavit from the parties concerned. These are possible sources of litigation. Other instances occur where more than one claimant appears as the beneficiary under the contract, each claiming to be the wife of the deceased. In such cases, a marriage certificate is necessary to establish the truth, in order that the Company may proceed to settle its obligations. The lack of these fundamental documents in civic accounting leads invariably to confusion and economic loss which, in the last analysis, is borne by the community at large.

DEATHS.

We can consider as our fourth point of investigation into the subject matter of vital statistics, the significance of death registration. A death constitutes a loss to the community, especially when young lives, full of promise and potential usefulness, are terminated. It is obvious that in community management the losses should be closely analyzed as to age, cause of death, economic and social condition of the deceased, etc., to indicate the precise lines of endeavor which the health officer and other officials should institute for the prevention of similar losses. This surely would be the procedure in the conduct of private business, and there is no reason why community losses should not be subject to the same scrutiny.

The complete registration of deaths makes possible the calculation of a death rate. Death rates, however, require a supplementary analysis before community wastes can be traced to their sources. The first step in the analysis is the calculation of the rates by ages, for, as you well know, the age constitution of a population is an important factor in determining its total mortality. With this fuller knowledge, the authorities can make a comparison with the experience of other communities to ascertain whether their losses are abnormal at any particular age. It is a common occurrence for communities with normal general death rates to suffer excessively at certain ages. Such facts can then be brought to the attention of responsible officials and their energies directed to specific remedial measures.

The utility of accurate mortality statistics by ages has never before been demonstrated with such emphasis as in the movement for the conservation of infant life. Agencies for education and practical social work, such as nursing associations, diet kitchens, milk stations and others, are concentrating their energies upon the solution of this problem which is of such intimate concern to society at large. The work of these institutions for preventing infant mortality is directed at improved sanitation, better housing and the education of mothers in the care of infants, and their efforts depend wholly upon the prior and exhaustive knowledge which good statistics alone can develop.

Again, the incidences of sex, nationality and occupation have their effect in coloring death rates of communities. A superabundance of deaths in a certain occupation-group, indicates the presence of adverse industrial conditions and points out the need for the enforcement of the labor laws or the necessity for more stringent legislation. The ultimate effect of occupation upon the health of women in industry is, moreover, made evident by a minute study of mortality data from the standpoint of occupation and sex. The tabulation of deaths and death rates by locality is also of use in discovering whether the application of special neighborhood health work is necessary. When one section of a city contributes more than its share of typhoid deaths, it is certain that local sanitary conditions need supervision and correction. By inaugurating proper measures, the causes may often be removed and the disease prevented from extending its ravages to other parts of the city.

You will now readily see the importance of recording full and accurate statements of the essential particulars regarding deaths. Items of name, age, place of death, date of death, marital condition, parentage and an accurate statement of all the morbid conditions which have had any bearing upon the death, should receive the utmost attention from health officers. No part of a death certificate should be admitted to the official files of the health offices until every error of fact is adjusted. Some State laws, fortunately, require registration officials to demand definite information from physicians, coroners and midwives who fill out such certificates, whenever data are missing, inaccurate, indefinite or incomplete. In other States, and they are the larger number, the registration laws are of indefinite force, and the returns reflect this condition. Only a stern and unrelenting criticism of documents can make statistics of this character reliable.

The accurate statement of the cause of death is, of all the items in the death certificate, the most important, and at the same time it involves the greatest difficulty in tabulation. In order that the utmost practical value may be obtained from the returns, it is necessary to adopt a uniform system of classification which will permit the comparison of mortality statistics of different communities. The requirement for international comparability is admirably met by the Bertillon Classification, now in use by the leading registration offices throughout the world. This International List, as you know, comprises 189 standard titles which are grouped under 14 general headings. Each standard title in the list includes under it the names of the diseases or conditions which can properly be classified with it. Thus, under "Typhoid Fever" we find such synonyms as "Continued Fever," "Enteric Fever," etc. Registration officials who in their practice meet with these rarer terms on death certificates, therefore, classify such returns uniformly under the "Typhoid Fever" title. It will readily be seen that uniformity of this character is absolutely essential to the comparability of typhoid fever rates, especially since various designations are still extensively employed in different sections of the country to describe the same morbid conditions. Other titles present similar problems of classification which are solved by the use of the International List. To this end, I most earnestly recommend the close study of the Bertillon system of classification by health officers, and especially of its discussion of the technique of classification for "multiple" causes of death.

Returns of Cause of Death should include all the morbid conditions contributing to the death, together with a statement of the duration of the disease and of its complications. It is especially important that the terms employed shall be of the standard nomenclature of the International Classification. The designation of terminal conditions, such as "peritonitis," "acute nephritis," "paralysis," "dropsy" and "meningitis," and of such vague returns as "marasmus," "heart failure," "hemorrhage," "convulsions" and "fractures," are wholly undesirable, and should be sharply questioned by health officers for more definite information which will permit of intelligent tabulation of the data. Nearly eight per cent. of the death certificates which enter the statistical laboratory of the Metropolitan Life Insurance Company present Cause of Death returns which require further information to permit of accurate tabulation. It is our practice to address a letter of inquiry to the physician or coroner signing the certificate in each case for more definite data, and it is gratifying to observe that in the large number of cases, clarifying replies are received in place of the earlier indefinite and unsatisfactory returns. Thus, in twenty-six returns of peritonitis without qualification, inquiry revealed that three deaths were caused by self-induced abortion, two by criminal abortion, two by appendicitis, three by puerperal fever, one by gonococcus infection, and the rest by causes such as alcoholism, tuberculosis, traumatism by falling, typhoid fever and cancer. Not one of the twenty-six cases was ultimately classified as "peritonitis."

These facts are reflected in Chart I, which shows the successive annual death rate from such indefinite causes as "peritonitis" and "dropsy" for the years 1900 to 1911, inclusive. You will see that the number of cases under these two titles have regularly decreased in frequency. This is undoubtedly the result of the more rigid requirements of the Census Bureau, which consistently returns such an assignment of the cause of death to the certifying physician for a more definite statement of the cause.

The term "poisoning" without further definition is often converted upon inquiry to a statement of "suicide," as have also numerous

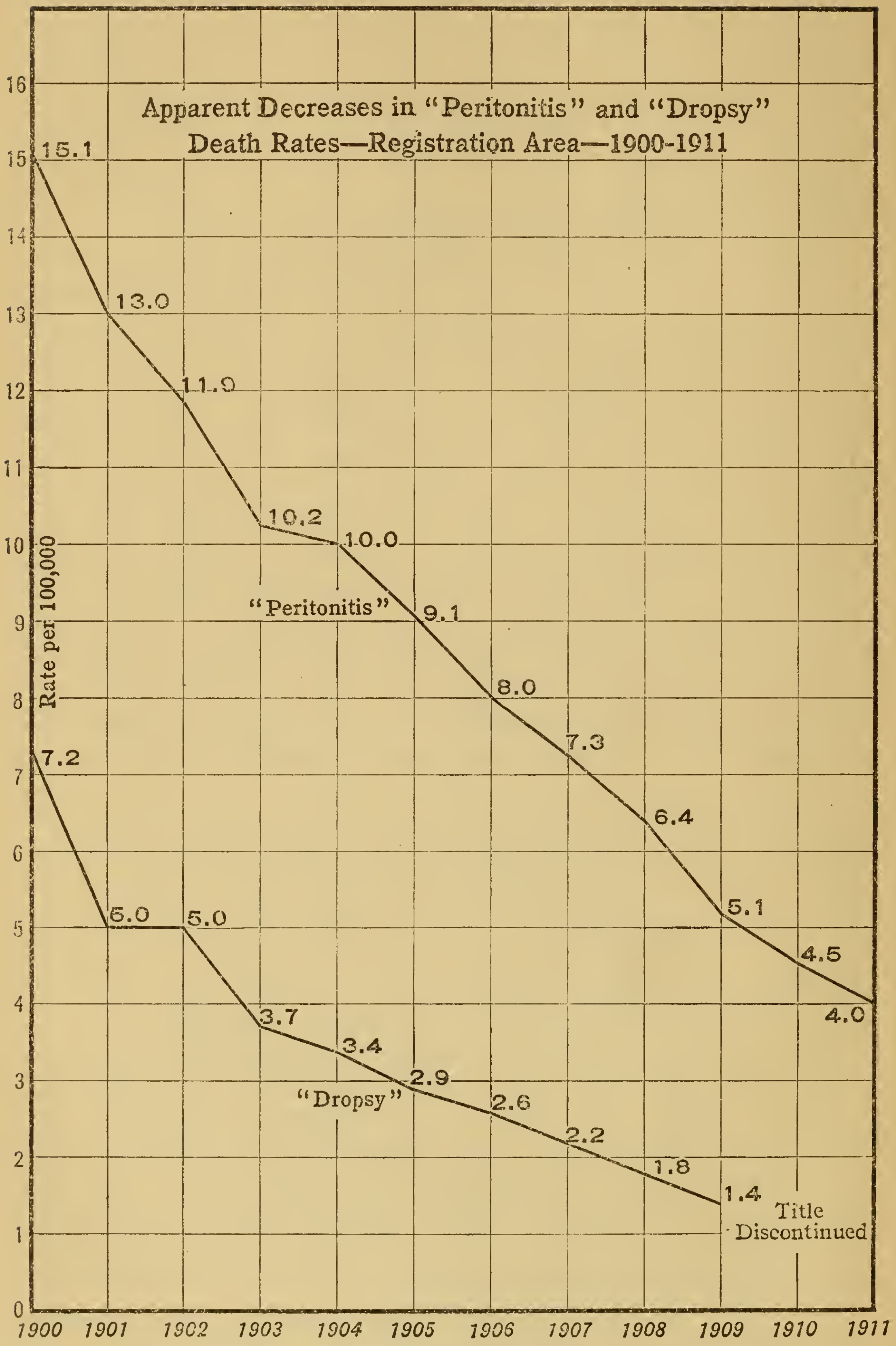
Apparent Decreases in "Peritonitis" and "Dropsy"
Death Rates—Registration Area—1900-1911
Rate per 100,000
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
1900
1901
1902
1903
1904
1905
1906
1907
1908
1909
1910
1911
"Peritonitis"
15.1
13.0
11.9
10.2
10.0
9.1
8.0
7.3
6.4
5.1
4.5
4.0
"Dropsy"
7.2
5.0
5.0
3.7
3.4
2.9
2.6
2.2
1.8
1.4
Title
Discontinued

CHART I

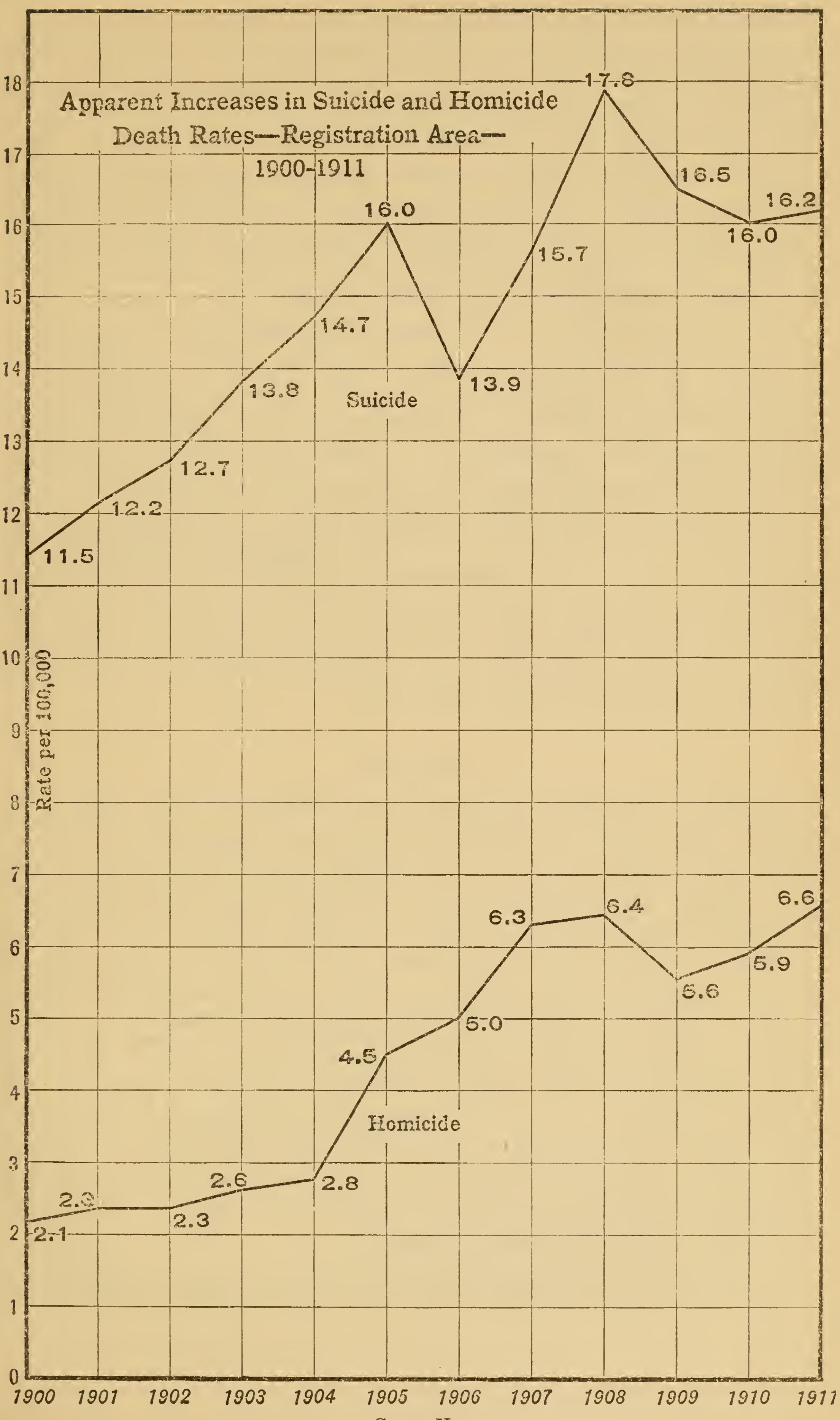
Apparent Increases in Suicide and Homicide
Death Rates—Registration Area—
1900-1911
Rate per 100,000
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
Suicide
11.5
12.2
12.7
13.8
14.7
16.0
13.9
15.7
17.8
16.5
16.0
16.2
Homicide
2.1
2.3
2.3
2.6
2.8
4.5
5.0
6.3
6.4
5.6
5.9
6.6
1900
1901
1902
1903
1904
1905
1906
1907
1908
1909
1910
1911

CHART II

instances of so-called "drowning." "Gunshot wounds" turn out to be clear cases of "homicide," while "fractures," upon further investigation, are found to be masked cases of railroad, automobile and machinery accidents. It is not surprising, therefore, to find, as is shown in Chart II, that the rates for "homicide" and "suicide" have increased regularly during the period since the inauguration of more scientific compiling methods. In the light of this fact, it is difficult to determine whether the indicated increases really represent a greater incidence of homicide and suicide in the Registration Area, or rather the effect of more efficient statistical methods.

Inquiries into returns of "meningitis" develop the existence of the acute infectious diseases such as "scarlet fever," "diphtheria," "measles" and "whooping-cough." The return "pneumonia," in like manner, is a mask for a whole host of more definite conditions such as "measles," "scarlet fever," "traumatisms" and "alcoholism," In view of the special interest of the community in these conditions, it is extremely important that there shall be especially complete registration of the cases in which the communicable diseases are the determining causes. It is reprehensible enough when the substitution of a terminal condition for a primary cause leads to the over-registration of undesirable titles, but what is more serious, is, that in this way, fatal cases of infectious and contagious diseases or of industrial and general violence are left unrecorded.

SICKNESS.

Finally, the statistics of sickness are materials for the vital statistician. The subject is, however, of such vast import that it will be impossible to refer to it in this address beyond the statement that it is through the analysis of case records of illness that much light is thrown upon the causal phases of disease and also upon clinical treatment. Statistics are, moreover, the chief test at the disposal of the community of its effective control over transmissible disease. To-day, millions of dollars are being expended annually by communities in their campaigns against tuberculosis and other disorders, with the hope that the various activities may check disease at one point or another. It is for a statistical investigation to determine the degree to which these efforts have been productive of results. Thus will be decided the fate of such experiments as visiting nursing, disinfection, isolation, sanatorium treatment for incipient tuberculosis and other ventures still under judgment.

In concluding this discussion of the business value of registration, I hope that I have indicated the extent and character of the losses which result from neglect of thoroughly registering vital phenomena. If communities were to realize that they are called upon ultimately to meet these losses, I think that we would have an awakening of public interest in careful civic accounting of human life. A wide-awake development in this direction would favorably affect the transaction of business along many lines. In life insurance companies alone, fully one-quarter of the disputes would never arise were adequate records at hand. The saving of losses due to present litigation could then be returned as larger benefits to our clients, and would remove many causes for dissatisfaction. We cannot regard these losses as anything more than downright waste.

The solution of the problems is entirely in your hands. Surely you must see that it is good business for a community to take these necessary precautions to account for its most vital resources. Nothing less than a most efficient system of accounting is now tolerated in any line of modern business, and surely the most important business, that which is concerned with the physical welfare of us all, should not be satisfied with anything less.

CIRCULAR LETTER CONCERNING NOTIFICATION OF CONTAGIOUS DISEASE DUE TO MILK.

The following letter was sent early in March, 1914, to local boards of health, institutions and physicians in the Commonwealth: —

NOTIFICATION OF CONTAGIOUS DISEASE DUE TO MILK.

COMMONWEALTH OF MASSACHUSETTS,
OFFICE OF STATE BOARD OF HEALTH, STATE HOUSE,
BOSTON, MASS., March 1, 1914.

To the Medical Profession in Massachusetts.

Section 8 of chapter 75 of the Revised Laws, as amended by chapter 670 of the Acts of the year 1913, reads as follows: —

> SECTION 8. If smallpox or any other contagious or infectious disease declared by the state board of health to be dangerous to the public health exists or is likely to exist in any place within the commonwealth, the state board shall make an investigation thereof and of the means of preventing the spread of the disease, and shall consult thereon with the local authorities. It shall have co-ordinate powers as a board of health, in every city and town, with the board of health thereof, or with the mayor and aldermen of a city or the selectmen of a town in which there is no such board. It may require the officers in charge of any city or state institution, charitable institution, public or private hospital, dispensary or lying-in hospital, or any local boards of health or the physicians in any city or town to give notice of cases of any disease declared by the state board of health to be dangerous to the public health. Such notice shall be given either in the manner prescribed in sections forty-nine, fifty and fifty-two of chapter seventy-five of the Revised Laws, as amended by chapter four hundred and eighty of the acts of the year nineteen hundred and seven, or in such other manner as the state board of health may deem advisable. If any such officer, board or physician refuses or neglects to give such notice, he or they shall forfeit not less than fifty nor more than two hundred dollars for each offence. [*Approved May 16, 1913.*

Acting under the provisions of this section, the State Board of Health, at a meeting held Feb. 5, 1914, *voted*, That, beginning March 1, 1914, it shall be the duty of the officers in charge of any city or State institution, charitable institution, public or private hospital, dispensary or lying-in hospital, or any local board of health or any physician in any city or town to give immediate notice (preferably by telephone or telegram, "collect") to the State Board of Health, Room 145, State House, Boston, Mass., in every case coming to their notice in which typhoid fever, diphtheria or scarlet fever has occurred in the household of any person engaged in the production, transportation or distribution of milk for public sale; and in every case coming to their notice in which typhoid fever, diphtheria or scarlet fever has been due, or presumably has been due, to the consumption of milk infected with material derived from persons infected with said diseases.

If you will make every effort to carry out the provisions of these regulations, the State Board of Health will be enabled, in many instances, to take such early and appropriate action as to eliminate, to a considerable extent at least, epidemics of the above-mentioned diseases due to the contamination of milk supplies.

Trusting that we shall have your hearty co-operation in this matter, I am,

Yours very truly,
MARK W. RICHARDSON, M.D.,
Secretary of State Board of Health.

New Series. FEBRUARY, 1914. Vol. 9. No. 2.

MONTHLY BULLETIN

OF THE

STATE BOARD OF HEALTH

OF

MASSACHUSETTS.

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APPROVED BY

THE STATE BOARD OF PUBLICATION.

RETURNS OF DISEASES.

CASES OF DISEASES DECLARED BY THE STATE BOARD OF HEALTH TO BE DANGEROUS TO THE PUBLIC HEALTH.

[Under the provisions of section 52 of chapter 75 of the Revised Laws.]

DISEASE.	WEEK ENDING —				
	Feb. 7.	Feb. 14.	Feb. 21.	Feb. 28.	Total.
Diphtheria,	159	144	169	151	623
Measles,	215	189	231	200	835
Scarlet fever,	351	329	376	376	1,432
Typhoid fever,	24	27	18	13	82
Tuberculosis, pulmonary (or not classified),	139	130	132	104	505
Tuberculous meningitis,	8	5	1	3	17
Tuberculosis, other forms,	10	6	6	5	27
Cerebro-spinal meningitis,	6	5	3	2	16
Whooping cough,	88	82	91	85	346
Varicella,	126	132	117	141	516
Ophthalmia neonatorum,	73	44	51	46	214
Trachoma,	–	1	–	–	1
Anterior poliomyelitis,	1	3	1	1	6

CASES OF INFECTIOUS DISEASES NOT INCLUDED IN THE ABOVE TABLE.

[Cases not notifiable under the provisions of section 52 of chapter 75 of the Revised Laws.]

DISEASE.	WEEK ENDING —				
	Feb. 7.	Feb. 14.	Feb. 21.	Feb. 28.	Total.
Mumps,	29	10	35	7	81
Erysipelas,	1	2	–	–	3

RETURNS OF DEATHS.

Deaths from Diseases declared by the State Board of Health to be Dangerous to the Public Health in Cities and Towns of More than 10,000 Population.

[Under the provisions of chapter 210, Acts of 1913.]

Week ending Feb. 7, 1914.

CITIES AND TOWNS.	Population. Census for 1910.	Total Number reported.	Tuberculosis, Pulmonary (or not classified).	Tuberculous Meningitis.	Tuberculosis, Other Forms.	Diphtheria.	Typhoid Fever.	Scarlet Fever.	Measles.	Whooping Cough.	Cerebro-spinal Meningitis.
Boston,	686,092	34[1] 39[2]	21[1] 24[2]	1[1] 2[2]	1[1] 2[2]	1[1] 1[2]	6[1] 6[2]	3[1] 3[2]	– –	1[1] 1[2]	– –
Worcester,	145,986	5	3	–	–	2	–	–	–	–	–
Fall River,	119,295	6	5	1	–	–	–	–	–	–	–
Lowell,	106,294	8	4	–	1	–	–	1	–	–	2
Cambridge,	104,839	6	3	–	–	1	–	1	1	–	–
New Bedford,	96,652	6	1	–	–	1	–	4	–	–	–
Lynn,	89,336	1	1	–	–	–	–	–	–	–	–
Springfield,	88,926	–	–	–	–	–	–	–	–	–	–
Lawrence,	85,892	–	–	–	–	–	–	–	–	–	–
Somerville,	77,236	2	2	–	–	–	–	–	–	–	–
Holyoke,	57,730	1	1	–	–	–	–	–	–	–	–
Brockton,	56,878	5	–	–	3	–	–	1	–	–	1
Malden,	44,404	1	1	–	–	–	–	–	–	–	–
Haverhill,	44,115	–	–	–	–	–	–	–	–	–	–
Salem,	43,697	–	–	–	–	–	–	–	–	–	–
Newton,	39,806	1	–	–	–	1	–	–	–	–	–
Fitchburg,	37,826	1	1	–	–	–	–	–	–	–	–
Taunton,	34,259	4	4	–	–	–	–	–	–	–	–
Everett,	33,484	1	1	–	–	–	–	–	–	–	–
Quincy,	32,642	1	1	–	–	–	–	–	–	–	–
Chelsea,	32,452	1	1	–	–	–	–	–	–	–	–
Pittsfield,	32,121	3	2	–	–	1	–	–	–	–	–
Waltham,	27,834	–	–	–	–	–	–	–	–	–	–
Brookline,	27,792	–	–	–	–	–	–	–	–	–	–
Chicopee,	25,401	1	–	–	–	1	–	–	–	–	–
Gloucester,	24,398	–	–	–	–	–	–	–	–	–	–
Medford,	23,150	–	–	–	–	–	–	–	–	–	–
North Adams,	22,019	1	–	–	–	1	–	–	–	–	–
Northampton,	19,431	–	–	–	–	–	–	–	–	–	–
Beverly,	18,650	2	1	–	–	–	1	–	–	–	–
Revere,	18,219	–	–	–	–	–	–	–	–	–	–
Leominster,	17,580	1	1	–	–	–	–	–	–	–	–
Attleborough,	16,215	–	–	–	–	–	–	–	–	–	–
Westfield,	16,044	1[1] 4[2]	– 3[2]	– –	– –	– –	– –	– –	1[1] 1[2]	– –	– –
Peabody,	15,721	–	–	–	–	–	–	–	–	–	–
Melrose,	15,715	–	–	–	–	–	–	–	–	–	–
Woburn,	15,308	–	–	–	–	–	–	–	–	–	–
Newburyport,	14,949	3	–	2	–	1	–	–	–	–	–
Gardner,	14,699	1	–	–	–	1	–	–	–	–	–
Marlborough,	14,579	–	–	–	–	–	–	–	–	–	–
Clinton,	13,075	–	–	–	–	–	–	–	–	–	–
Milford,	13,055	–	–	–	–	–	–	–	–	–	–
Adams,	13,026	–	–	–	–	–	–	–	–	–	–
Framingham,	12,948	–	–	–	–	–	–	–	–	–	–
Weymouth,	12,895	–	–	–	–	–	–	–	–	–	–
Watertown,	12,875	–	–	–	–	–	–	–	–	–	–
Southbridge,	12,592	–	–	–	–	–	–	–	–	–	–
Plymouth,	12,141	–	–	–	–	–	–	–	–	–	–
Webster,	11,509	1	–	1	–	–	–	–	–	–	–
Methuen,	11,448	–	–	–	–	–	–	–	–	–	–
Wakefield,	11,404	2	1	–	–	–	–	–	–	–	1
Arlington,	11,187	–	–	–	–	–	–	–	–	–	–
Greenfield,	10,427	1	–	–	–	–	–	–	–	–	1
Winthrop,	10,132	–	–	–	–	–	–	–	–	–	–
Total of reporting towns,	1,990,014	109	61	6	6	11	7	10	2	1	5

---

[1] Nonresidents deducted.

[2] Total deaths

Week ending Feb. 14, 1914.

CITIES AND TOWNS.	Population. Census for 1910.	Total Number reported.	Tuberculosis, Pulmonary (or not classified).	Tuberculous Meningitis.	Tuberculosis, Other Forms.	Diphtheria.	Typhoid Fever.	Scarlet Fever.	Measles.	Whooping Cough.	Cerebro-spinal Meningitis.
Boston, ...	686,092	26[1] 29[2]	24[1] 25[2]	1[1] 3[2]	–	–	1[1] 1[2]	–	–	–	–
Worcester, ...	145,986	5	2	1	1	–	–	–	–	1	–
Fall River, ...	119,295	6	5	–	–	–	–	1	–	–	–
Lowell, ...	106,294	7	2	–	–	3	–	–	–	–	2
Cambridge, ...	104,839	3	1	1	1	–	–	–	–	–	–
New Bedford, ...	96,652	10	5	–	–	1	–	4	–	–	–
Lynn, ...	89,336	3	1	–	2	–	–	–	–	–	–
Springfield, ...	88,926	2	–	–	2	–	–	–	–	–	–
Lawrence, ...	85,892	–	–	–	–	–	–	–	–	–	–
Somerville, ...	77,236	2	2	–	–	–	–	–	–	–	–
Holyoke, ...	57,730	–	–	–	–	–	–	–	–	–	–
Brockton, ...	56,878	6	3	1	–	2	–	–	–	–	–
Malden, ...	44,404	–	–	–	–	–	–	–	–	–	–
Haverhill, ...	44,115	–	–	–	–	–	–	–	–	–	–
Salem, ...	43,697	–	–	–	–	–	–	–	–	–	–
Newton, ...	39,806	1	1	–	–	–	–	–	–	–	–
Fitchburg, ...	37,826	–	–	–	–	–	–	–	–	–	–
Taunton, ...	34,259	6	4	–	–	–	–	2	–	–	–
Everett, ...	33,484	2	–	1	–	–	1	–	–	–	–
Quincy, ...	32,642	1	1	–	–	–	–	–	–	–	–
Chelsea, ...	32,452	2	–	–	–	–	1	–	1	–	–
Pittsfield, ...	32,121	3	1	–	–	–	–	1	–	–	1
Waltham, ...	27,834	1	1	–	–	–	–	–	–	–	–
Brookline, ...	27,792	–	–	–	–	–	–	–	–	–	–
Chicopee, ...	25,401	–	–	–	–	–	–	–	–	–	–
Gloucester, ...	24,398	–	–	–	–	–	–	–	–	–	–
Medford, ...	23,150	–	–	–	–	–	–	–	–	–	–
North Adams, ...	22,019	–	–	–	–	–	–	–	–	–	–
Northampton, ...	19,431	–	–	–	–	–	–	–	–	–	–
Beverly, ...	18,650	–	–	–	–	–	–	–	–	–	–
Revere, ...	18,219	–	–	–	–	–	–	–	–	–	–
Leominster, ...	17,580	–	–	–	–	–	–	–	–	–	–
Attleborough, ...	16,215	1	1	–	–	–	–	–	–	–	–
Westfield, ...	16,044	1[1] 2[2]	1 2[2]	–	–	–	–	–	–	–	–
Peabody, ...	15,721	1	–	–	–	–	–	1	–	–	–
Melrose, ...	15,715	–	–	–	–	–	–	–	–	–	–
Woburn, ...	15,308	1	1	–	–	–	–	–	–	–	–
Newburyport, ...	14,949	1	1	–	–	–	–	–	–	–	–
Gardner, ...	14,699	1	–	–	–	1	–	–	–	–	–
Marlborough, ...	14,579	–	–	–	–	–	–	–	–	–	–
Clinton, ...	13,075	–	–	–	–	–	–	–	–	–	–
Milford, ...	13,055	–	–	–	–	–	–	–	–	–	–
Adams, ...	13,026	–	–	–	–	–	–	–	–	–	–
Framingham, ...	12,948	–	–	–	–	–	–	–	–	–	–
Weymouth, ...	12,895	–	–	–	–	–	–	–	–	–	–
Watertown, ...	12,875	–	–	–	–	–	–	–	–	–	–
Southbridge, ...	12,592	1	1	–	–	–	–	–	–	–	–
Plymouth, ...	12,141	–	–	–	–	–	–	–	–	–	–
Webster, ...	11,509	–	–	–	–	–	–	–	–	–	–
Methuen, ...	11,448	–	–	–	–	–	–	–	–	–	–
Wakefield, ...	11,404	–	–	–	–	–	–	–	–	–	–
Arlington, ...	11,187	–	–	–	–	–	–	–	–	–	–
Greenfield, ...	10,427	–	–	–	–	–	–	–	–	–	–
Winthrop, ...	10,132	1	–	1	–	–	–	–	–	–	–
Total of reporting towns, . .	1,919,792	98	60	8	6	7	3	9	1	1	3

[1] Nonresidents deducted.

[2] Total deaths.

Week ending Feb. 21, 1914.

CITIES AND TOWNS.	Population. Census for 1910.	Total Number reported.	Tuberculosis, Pulmonary (or not classified).	Tuberculous Meningitis.	Tuberculosis, Other Forms.	Diphtheria.	Typhoid Fever.	Scarlet Fever.	Measles.	Whooping Cough.	Cerebro-spinal Meningitis.
Boston, ...	686,092	35[1] 38[2]	23[1] 24[2]	1[1] 1[2]	1[1] 1[2]	4[1] 5[2]	4[1] 4[2]	1[1] 1[2]	– –	– 1[2]	1[1] 1[2]
Worcester, ...	145,986	6	5	–	–	–	–	1	–	–	–
Fall River, ...	119,295	7	5	–	–	1	–	1	–	–	–
Lowell, ...	106,294	3	2	–	–	1	–	–	–	–	–
Cambridge, ...	104,839	7	5	–	–	–	–	–	1	1	–
New Bedford, ...	96,652	7	3	1	–	2	–	1	–	–	–
Lynn, ...	89,336	1	1	–	–	–	–	–	–	–	–
Springfield, ...	88,926	2	2	–	–	–	–	–	–	–	–
Lawrence, ...	85,892	–	–	–	–	–	–	–	–	–	–
Somerville, ...	77,236	5	4	–	–	1	–	–	–	–	–
Holyoke, ...	57,730	1	1	–	–	–	–	–	–	–	–
Brockton, ...	56,878	–	–	–	–	–	–	–	–	–	–
Malden, ...	44,404	1	–	–	–	1	–	–	–	–	–
Haverhill, ...	44,115	1	1	–	–	–	–	–	–	–	–
Salem, ...	43,697	–	–	–	–	–	–	–	–	–	–
Newton, ...	39,806	2	–	–	1	–	1	–	–	–	–
Fitchburg, ...	37,826	1	–	–	–	1	–	–	–	–	–
Taunton, ...	34,259	–	–	–	–	–	–	–	–	–	–
Everett, ...	33,484	1	–	–	–	1	–	–	–	–	–
Quincy, ...	32,642	2	2	–	–	–	–	–	–	–	–
Chelsea, ...	32,452	1	–	–	–	–	–	1	–	–	–
Pittsfield, ...	32,121	–	–	–	–	–	–	–	–	–	–
Waltham, ...	27,834	2	2	–	–	–	–	–	–	–	–
Brookline, ...	27,792	–	–	–	–	–	–	–	–	–	–
Chicopee, ...	25,401	1	1	–	–	–	–	–	–	–	–
Gloucester, ...	24,398	–	–	–	–	–	–	–	–	–	–
Medford, ...	23,150	–	–	–	–	–	–	–	–	–	–
North Adams, ...	22,019	1	1	–	–	–	–	–	–	–	–
Northampton, ...	19,431	1	1	–	–	–	–	–	–	–	–
Beverly, ...	18,650	–	–	–	–	–	–	–	–	–	–
Revere, ...	18,219	2	–	–	–	2	–	–	–	–	–
Leominster, ...	17,580	–	–	–	–	–	–	–	–	–	–
Attleborough, ...	16,215	2	1	–	–	1	–	–	–	–	–
Westfield, ...	16,044	–	–	–	–	–	–	–	–	–	–
Peabody, ...	15,721	2	–	–	–	–	–	1	–	1	–
Melrose, ...	15,715	–	–	–	–	–	–	–	–	–	–
Woburn, ...	15,308	–	–	–	–	–	–	–	–	–	–
Newburyport, ...	14,949	1	–	–	–	1	–	–	–	–	–
Gardner, ...	14,699	2	1	–	–	1	–	–	–	–	–
Marlborough, ...	14,579	–	–	–	–	–	–	–	–	–	–
Clinton, ...	13,075	1	1	–	–	–	–	–	–	–	–
Milford, ...	13,055	–	–	–	–	–	–	–	–	–	–
Adams, ...	13,026	1	1	–	–	–	–	–	–	–	–
Framingham, ...	12,948	–	–	–	–	–	–	–	–	–	–
Weymouth, ...	12,895	–	–	–	–	–	–	–	–	–	–
Watertown, ...	12,875	–	–	–	–	–	–	–	–	–	–
Southbridge, ...	12,592	–	–	–	–	–	–	–	–	–	–
Plymouth, ...	12,141	–	–	–	–	–	–	–	–	–	–
Webster, ...	11,509	–	–	–	–	–	–	–	–	–	–
Methuen, ...	11,448	–	–	–	–	–	–	–	–	–	–
Wakefield, ...	11,404	–	–	–	–	–	–	–	–	–	–
Arlington, ...	11,187	–	–	–	–	–	–	–	–	–	–
Greenfield, ...	10,427	–	–	–	–	–	–	–	–	–	–
Winthrop, ...	10,132	–	–	–	–	–	–	–	–	–	–
Total of reporting towns, . .	2,037,704	102	64	2	2	18	5	6	1	3	1

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[1] Nonresidents deducted.

[2] Total deaths.

Week ending Feb. 28, 1914.

CITIES AND TOWNS.	Population. Census for 1910.	Total Number reported.	Tuberculosis, Pulmonary (or not classified).	Tuberculous Meningitis.	Tuberculosis, Other Forms.	Diphtheria.	Typhoid Fever.	Scarlet Fever.	Measles.	Whooping Cough.	Cerebro-spinal Meningitis.
Boston,	686,092	35[1] 40[2]	25[1] 28[2]	3[1] 3[2]	1[1] 2[2]	5[1] 6[2]	- -	- -	- -	- -	1[1] 1[2]
Worcester,	145,986	6	3	1	1	-	-	1	-	-	-
Fall River,	119,295	6	2	1	-	1	-	1	-	1	-
Lowell,	106,294	8	3	-	-	1	1	-	3	-	-
Cambridge,	104,839	4	3	-	-	1	-	-	-	-	-
New Bedford,	96,652	11	8	-	-	1	-	1	-	1	-
Lynn,	89,336	7	4	1	2	-	-	-	-	-	-
Springfield,	88,926	2	1	1	-	-	-	-	-	-	-
Lawrence,	85,892	2	1	-	-	-	1	-	-	-	-
Somerville,	77,236	10	8	-	-	2	-	-	-	-	-
Holyoke,	57,730	-	-	-	-	-	-	-	-	-	-
Brockton,	56,878	-	-	-	-	-	-	-	-	-	-
Malden,	44,404	2	2	-	-	-	-	-	-	-	-
Haverhill,	44,115	1	1	-	-	-	-	-	-	-	-
Salem,	43,697	-	-	-	-	-	-	-	-	-	-
Newton,	39,806	2	1	1	-	-	-	-	-	-	-
Fitchburg,	37,826	1	-	-	-	-	-	1	-	-	-
Taunton,	34,259	2	2	-	-	-	-	-	-	-	-
Everett,	33,484	-	-	-	-	-	-	-	-	-	-
Quincy,	32,642	-	-	-	-	-	-	-	-	-	-
Chelsea,	32,452	2[3]	-	1	-	-	-	-	-	-	-
Pittsfield,	32,121	3	2	-	-	-	-	1	-	-	-
Waltham,	27,834	-	-	-	-	-	-	-	-	-	-
Brookline,	27,792	-	-	-	-	-	-	-	-	-	-
Chicopee,	25,401	-	-	-	-	-	-	-	-	-	-
Gloucester,	24,398	-	-	-	-	-	-	-	-	-	-
Medford,	23,150	2	2	-	-	-	-	-	-	-	-
North Adams,	22,019	1	-	-	-	1	-	-	-	-	-
Northampton,	19,431	1	1	-	-	-	-	-	-	-	-
Beverly,	18,650	-	-	-	-	-	-	-	-	-	-
Revere,	18,219	2	2	-	-	-	-	-	-	-	-
Leominster,	17,580	-	-	-	-	-	-	-	-	-	-
Attleborough,	16,215	-	-	-	-	-	-	-	-	-	-
Westfield,	16,044	-	-	-	-	-	-	-	-	-	-
Peabody,	15,721	1	-	-	-	1	-	-	-	-	-
Melrose,	15,715	-	-	-	-	-	-	-	-	-	-
Woburn,	15,308	-	-	-	-	-	-	-	-	-	-
Newburyport,	14,949	1	-	1	-	-	-	-	-	-	-
Gardner,	14,699	-	-	-	-	-	-	-	-	-	-
Marlborough,	14,579	-	-	-	-	-	-	-	-	-	-
Clinton,	13,075	1	-	-	-	1	-	-	-	-	-
Milford,	13,055	-	-	-	-	-	-	-	-	-	-
Adams,	13,026	2	-	-	-	-	-	-	2	-	-
Framingham,	12,948	-	-	-	-	-	-	-	-	-	-
Weymouth,	12,895	-	-	-	-	-	-	-	-	-	-
Watertown,	12,875	-	-	-	-	-	-	-	-	-	-
Southbridge,	12,592	-	-	-	-	-	-	-	-	-	-
Plymouth,	12,141	-	-	-	-	-	-	-	-	-	-
Webster,	11,509	-	-	-	-	-	-	-	-	-	-
Methuen,	11,448	-	-	-	-	-	-	-	-	-	-
Wakefield,	11,404	-	-	-	-	-	-	-	-	-	-
Arlington,	11,187	-	-	-	-	-	-	-	-	-	-
Greenfield,	10,427	-	-	-	-	-	-	-	-	-	-
Winthrop,	10,132	-	-	-	-	-	-	-	-	-	-
Total of reporting towns,	2,005,121	120	74	10	5	15	2	5	5	2	1

[1] Nonresidents deducted.

[2] Total deaths.

[3] One death from chicken pox.

DEATHS FROM DISEASES DECLARED BY THE STATE BOARD OF HEALTH TO BE DANGEROUS TO THE PUBLIC HEALTH IN TOWNS OF LESS THAN 10,000 POPULATION.

[Under the provisions of chapter 210, Acts of 1913.]

DISEASE.	Place.	WEEK ENDING —			
		Feb. 7.	Feb. 14.	Feb. 21.	Feb. 28.
Tuberculosis, pulmonary (or not classified).	Berlin, . .	–	–	–	1
	Blackstone, .	–	–	1	–
	Douglas, . .	–	1	–	–
	Franklin, . .	1	–	–	–
	Lancaster, . .	1	–	–	–
	Lunenburg, .	–	–	1	–
	Montague, . .	–	–	2	–
	No. Attleborough,	–	1	–	–
	Palmer, . .	–	–	2	–
	Rockport, . .	–	–	–	1
	Sandwich, . .	1	–	–	–
	Sharon, . .	1	–	–	–
	Somerset, . .	–	–	1	–
	Spencer, . .	1	–	–	–
Total, . .	. . . . .	5	2	7	2
Tuberculosis, other forms.	Bridgewater, .	1	–	–	–
Diphtheria, . .	Braintree, . .	–	–	–	1
	Easton, . .	–	1	–	–
	Hampden, . .	1	–	–	–
	Norwood, . .	–	–	1	–
Total, . . .	. . . . .	1	1	1	1
Scarlet fever, . .	Pepperell, . .	–	1	–	–
	Sharon, . .	1	–	–	–
	South Hadley, .	–	–	–	1
Total, . . .	. . . . .	1	1	–	1
Whooping cough, .	Acushnet, . .	–	–	1	–
	Braintree, . .	–	1	–	–
Total, . . .	. . . . .	–	1	1	–
Anterior poliomyelitis, .	Easthampton, .	–	1	–	–
Cerebro-spinal meningitis.	Norwood, . .	–	1	–	–

REPORT ON INSPECTION OF FOOD AND DRUGS.

Laboratory Examinations of Food and Drugs.

The following tables present the results of the laboratory examinations during the month of February, 1914, of samples of food and drugs collected by inspectors of the Board: —

Summary of Analyses.

Articles examined.	Number found to be of Good Quality.	Number adulterated or varying from the Legal Standard.	Total.
Butter,	3	–	3
Canned fruits and vegetables,	6	–	6
Canned meats and fish,	4	–	4
Cheese,	1	–	1
Cider,	1	–	1
Coffee,	8	–	8
Condensed milk,	5	1	6
Confectionery,	3	–	3
Crackers,	1	–	1
Cream,	12	2	14
Cream of tartar,	2	–	2
Drugs,	132	27	159
Eggs,	7	4	11
Flavoring extracts: —			
Lemon,	1	–	1
Peppermint,	1	1	2
Vanilla,	3	1	4
Flour,	3	–	3
Fruit juice: —			
Grape,	3	–	3
Honey,	1	–	1
Ice cream,	6	–	6
Jams and jellies,	4	–	4
Lard,	1	–	1
Maple sugar,	5	1	6
Maple syrup,	3	3	6
Meat products: —			
Crab meat,	1	–	1
Hamburg steak,	1	1	2
Mince meat,	3	2	5
Sausages,	37	21	58
Scallops,	1	–	1
Milk,	211	34	245
Proprietary food,	–	1	1
Peanut butter,	1	–	1
Pickles,	4	–	4
Shrimp,	2	–	2

Summary of Analyses — Concluded.

Articles examined.	Number found to be of Good Quality.	Number adulterated or varying from the Legal Standard.	Total.
Spices,	4	–	4
Syrup,	3	–	3
Table sauce,	–	2	2
Tea,	1	–	1
Vinegar,	3	2	5
Olive oil,	7	–	7
Totals,	495	103	598

The samples of drugs found to be adulterated were proprietary drugs, spirit of nitrous ether, spirit of anise, spirit of wintergreen, spirit of peppermint, tincture of iodine, tincture of vanilla and mercurial ointment.

The cities and towns in which samples were collected were: Billerica, Boston, Brockton, Cambridge, Chelsea, Chicopee, Everett, Fall River, Lowell, Lynn, Malden, Medford, Needham, New Bedford, Newton, Northampton, Plymouth, Quincy, Rockland, Saugus, Somerville, Springfield, Stoneham, Taunton, Tewksbury, Waltham, Watertown, Winchester, Woburn, Worcester.

PROSECUTIONS FOR VIOLATIONS OF THE LAW RELATING TO FOOD AND DRUGS.

Four convictions were secured during the month of February, 1914, for selling adulterated food and drugs, as follows: —

No.	Name of Defendant.	Place.	Character of Article sold.
1	Michael L. Moran,	Medford,	Cider (benzoic acid).
2	Carl B. Geder,	Malden,	Cider (benzoic acid).
3	Joseph H. McManus,	Boston,	Cider (benzoic acid).
4	John E. Moran,	Boston,	Cider (benzoic acid).

Fines imposed, $20.

LIST OF SAMPLES OF FOOD, DRUGS AND MILK COLLECTED DURING THE MONTH OF FEBRUARY, 1914.

Samples of Food in which No Adulteration was detected.

CANNED FRUITS AND VEGETABLES.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
q 12652	Boston Butter and Tea Company, Worcester,	Salt City Wrinkled. H. C. Hemingway & Co., New York.
23308	New York Delicatessen, Springfield,	Doyles Country Club. The John T. Doyle Company, New Haven, Conn.
q 13124	S. S. Pierce Company, Boston,	S. S. Pierce Company, Boston.
23286	Rood & Woodbury, Springfield,	Bridal. Thomas Roberts & Co., Philadelphia, Pa.
23573	H. Siegel Company, Boston,	Snider's New Process. The T. A. Snider Process Company, Ohio.
23572	H. Siegel Company, Boston,	Eagle. Gebhardt Chili Powder Company, San Antonio, Tex.

CANNED MEATS AND FISH.

7632-R	Worcester Market, Worcester,	Tally-ho. Alaska Packers Association, Puget Sound.
7634-R	Worcester Market, Worcester,	Market. Deep Sea Salmon, Inc., Seattle, Wash.
7918-R	Worcester Market, Worcester,	Pride of Columbia. Columbia River Packers Association, Oregon.
7920-R	Worcester Market, Worcester,	Pride of Columbia. Columbia River Packers Association, Oregon.

CHEESE.

q 13094	New York Butter and Tea Company, Worcester.	

COFFEE.

23611	London Tea Company, Boston.	
5721-S	Main Street Public Market, Worcester.	
q 12968	New York Butter and Tea Company, Worcester.	
q 13097	New York Butter and Tea Company, Worcester.	
23404	Dock Square Tea Co., Boston.	

CONDENSED MILK.

6960-R	Arnolds Grocery, Worcester,	"Berna." Berna Milk Company, Thoune, Switzerland.
q 12903	L. W. Pearson, South Main Street, Brockton,	Trumpet. Boston Dairy Company, Boston.
7916-R	North Main Market, Worcester,	Poppy. Oatman Condensed Milk Company, Dundee, Ill.
7630-R	North Main Market, Worcester,	Marvel. Lewisburg Condensed Milk Company, Lewisburg, Pa.
23571	H. Siegel Company, Boston,	Gold Cross. Mohawk Condensed Milk Company, New York.

Samples of Food in which No Adulteration was detected — Continued.

CONFECTIONERY.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
7804-R	Candy Store, Lowell.	
23484	John M. Dean, Fall River.	
7770-R	Emanuel's Candy Store, Quincy.	

CREAM OF TARTAR.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
6842-R	Cooley's Grocery, Pittsfield.	
5949-S	J. F. Sweeney, Cambridge.	

EGGS.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
6017-S	General Baking Company, Boston.	
6149-S	Goldsmith Wall Company, Boston.	
6151-S	Goldsmith Wall Company, Boston.	
6155-S	Goldsmith Wall Company, Boston.	
6157-S	Goldsmith Wall Company, Boston.	
6159-S	Goldsmith Wall Company, Boston.	
6161-S	Goldsmith Wall Company, Boston.	

FLAVORING EXTRACTS.

Peppermint.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
23554	Cobb, Bates & Yerxa Company, Taunton, . .	Harris Extract Company, New York.

Vanilla.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
23373	C. S. Johnson, Roxbury, ...	Lion. Highland Drug and Chemical Corporation, Rockport.
q 13134	Revere Pharmacy, Revere, ...	E. L. Patch Company, Boston.

GRAPE JUICE.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
	Houghton & Dutton, Boston, ...	Smith & Painter Company, Delaware.
	L. M. Johnson, Boston, ...	Top-Notch. Armour & Co., Illinois.
	L. M. Johnson, Boston, ...	Welch Grape Juice Company, New York.

HONEY.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
7830-R	Jaynes Drug Company, Springfield, . . .	Individual Service Pure Honey. A. I. Root Company, Medina, O.

JAMS, JELLIES AND PRESERVED FRUITS.

Cherries.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
7602-R	Fruit Store, Worcester, ...	Imperial. Van Dyke & Catrevas.
23372	C. S. Johnson, Roxbury, ...	Choice Quality. Betterman Johnson Company, Cincinnati, O.

Samples of Food in which No Adulteration was detected — Continued.

JAMS, JELLIES AND PRESERVED FRUITS — Concluded.

Jams.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
23516	Henney & Co., Chelsea,	Williams Bros. Company, Detroit, Mich.
23316	Smith & Murray, Springfield,	Savoy. Leeman Bros., New York.

MAPLE SUGAR.

7720-R	J. Laura Celli, Malden.	
7872-R	Fruit Store, 237 Pleasant Street, Malden.	
7896-R	Green, the Druggist, Worcester.	
6169-S	Epstein Drug Company, Boston,	Bay State Maple Syrup Company.

MAPLE SYRUP.

6770-R	E. B. Stiles, Malden.	
7676-R	E. B. Stiles, Malden.	

MEAT PRODUCTS.

Crab Meat.

6089-S	M. T. Foley, Boston.	

Frankfort Sausage.

7818-R	J. F. Burke & Son, Springfield.	
23558	Cobb, Bates & Yerxa, Taunton.	
7023-S	George Fairburn, Lowell.	
q 13090	Front Street Market, Worcester.	
q 13092	Front Street Market, Worcester.	
23587	King's Public Market, Springfield.	
q 13060	Mohican Company, Brockton.	
7834-R	Mohican Company, Springfield.	
23583	Mohican Company, Springfield.	
6083-S	A. Rabinovitz, Boston.	
7808-R	F. J. Saunders, Lowell.	
6147-S	Spiegel Company, Boston.	
23559	Taunton Public Market, Taunton.	

Sausage.

23557	Cobb, Bates & Yerxa, Taunton.	
23586	King's Public Market, Springfield.	
7836-R	Mohican Market, Springfield.	
23582	Mohican Market, Springfield.	
7926-R	North Main Market, Worcester.	
7760-R	Park Sausage and Provision Company, Boston.	
23577	Rood & Woodbury, Springfield.	
23579	Rood & Woodbury, Springfield.	
7806-R	N. F. Saunders, Lowell.	
7922-R	Worcester Market, Worcester.	

Southern Scallops.

6087-S	M. T. Foley, Boston.	

Samples of Food in which No Adulteration was detected — Continued.

MEAT PRODUCTS — Concluded.

Mince Meat.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
23580	Rood & Woodbury, Springfield.	
23447	Whitehead's Market, Fall River.	

Sausage Binder.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
6177-S	Heskamp, Bunke Company, Boston.	

Olive Oil.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
23522	Freeman & Co., Chelsea,	C. W. Freeman & Co., Chelsea.
7882-R	Fruit Store, 323 Union Square, Somerville,	A. Cardinelli, Boston.
7546-R	Grocery, 7 Thorndike Street, Lowell,	Scaramelli.
7584-R	Houpis Fruit Company, Lowell,	E. G. Sophos, Lowell.
23445	Stavoris & Co., Fall River,	Greek. Stavoris & Samitas, Fall River.
6163-S	—— ——, Norman Street, Boston,	Olio Puro D'Oliva, Beniamino Aguglia, Sicily, Italy.

PEANUT BUTTER.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
23485	John M. Dean, Fall River.	

PICKLES.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
7206-R	J. B. Blood, Lynn.	
6085-S	A. Rabinovitz, Boston.	
23581	Rood & Woodbury Co., Springfield.	
7636-R	Worcester Market, Worcester.	

POTATO FLOUR.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
6171-S	Heskamp, Bunke Company, Boston.	
6173-S	Heskamp, Bunke Company, Boston.	

SHRIMP.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
7810-R	Fish Market, 517 Main Street, Springfield.	
7888-R	Worcester Market, Worcester.	

SPICES.

Black Pepper.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
23589	King's Public Market, Springfield,	Williams Black Pepper. Williams & Carleton Company, Connecticut.

White Pepper.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
23590	King's Public Market, Springfield,	Williams White Pepper, Williams & Carleton Company, Connecticut.

Samples of Food in which No Adulteration was detected — Concluded.

SPICES — Concluded.

Mustard.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
23570	Swan & Co., Boston, ...	MacDonald's Home Prepared Mustard.

Pimento.

6179-S	Heskamp, Bunke Company, Boston.	

SYRUPS.

23309	New York Delicatessen, Springfield, . . .	L. Calvin Schafer, New York.
23575	H. Siegel Company, Boston, ...	A. H. Bullard, New York, Boston.
q 12962	Smith & Murray, Springfield, ...	Falcon Packing Company, New York.

TEA.

q 13098	New York Butter & Tea Company, Worcester.	

VINEGAR.

23514	Henney & Co., Chelsea.	
6798-R	E. Miller, Pittsfield, ...	C. S. Hirsch & Co., New York.
23568	Oak Grove Bakery, Boston.	

Samples of Food which upon Examination were found to be labeled in Accordance with Law.

CIDER.

q 13104	Quincy Market, A. V. Peabody, Boston.	

COMPOUND COFFEE.

q 13087	Front Street Market, Worcester.	
q 13088	Front Street Market, Worcester.	
q 13089	Front Street Market, Worcester.	

COMPOUND LARD.

7027-S	George Fairburn, Lowell.	

COMPOUND SUGAR.

6183-S	Italian Fruit Store, Somerville, ...	Appetone.

Samples of Food which upon Examination were found to be labeled in Accordance with the Law — Concluded.

FLAVORING EXTRACTS.

Lemon.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
q 13103	E. E. Gray Company, Boston, ...	Columbia.

Vanilla.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
q 13102	E. E. Gray Company, Boston, ...	Columbia.

MEAT PRODUCTS.

Hamburg Steak.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
q 13099	Atwood & Co., Boston.	

OLEOMARGARINE.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
7025-S	George Fairburn, Lowell.	
7029-S	Grocer, Merrimack Square, Lowell.	
q 13096	New York Butter & Tea Company, Worcester.	

Samples of Food which upon Examination were found to be adulterated.

FLAVORING EXTRACTS.

Peppermint (low in Peppermint Oil).

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
q 13101	E. E. Gray Company, Boston, ...	Columbia. E. E. Gray Company, Boston.

Vanilla (containing Coumarin).

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
23406	Dock Square Tea Company, Boston, . . .	Higyene. Higyene Company, Jamaica Plain.

MAPLE SUGAR (CONTAINING CANE SUGAR).

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
7814-R	Fruit Store, 550 Main Street, Springfield.	

MAPLE SYRUP (CONTAINING CANE SUGAR).

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
23486	John M. Dean, Fall River, ...	Standard. J. H. Barker & Co., New York.
23515	Henney & Co., Chelsea.	
q 13100	E. E. Gray Company, Boston.	

Samples of Food which upon Examination were found to be adulterated — Concluded.

MEAT PRODUCTS (CONTAINING CEREAL).

Frankfort Sausage.

q 13091	Front Street Market, Worcester.	
q 13093	Front Street Market, Worcester.	
7766–R	Park Sausage and Provision Company, Boston.	
7758–R	Park Sausage and Provision Company, Boston.	
7762–R	Park Sausage and Provision Company, Boston.	
23578	Rood & Woodbury, Springfield.	

Sausage.

7764–R	Park Sausage and Provision Company, Boston.	

Beef Sausage.

23588	King's Public Market, Springfield.	

Pork Sausage.

23560	Taunton Public Market, Taunton.	

TABLE SAUCES.

Tomato Ketchup (containing Benzoic Acid).

q 13095	New York Butter and Tea Company, Worcester.	

TOMATO BOUILLON (CONTAINING BENZOIC ACID).

23574	H. Siegel Co., Boston, ...	Armour & Co., Chicago, Ill.

VINEGAR (BELOW STANDARD FOR ACIDITY).

6165–S	—— ——, Norman Street, Boston.	
23088	Provision Store, Attleborough.	

Samples of Drugs in which No Adulteration was detected.

ALCOHOL.

Number of Sample.	DEALER.	Wholesaler or Manufacturer.
23446	City Wine Company, Fall River.	
23612	Con. Keefe, Boston.	
23519	Lipp & Co., Chelsea.	
23518	Liquor Store, Everett Avenue, Chelsea.	
23387	J. E. Moran, Boston.	
23520	Daniel O'Connell, Chelsea.	
23549	Price Bros., Boston.	
23569	Swain's & Co., Boston.	
23613	Tniel's Liquor Store, Boston.	

Samples of Drugs in which No Adulteration was detected — Continued.

BEESWAX.

23567	Hawthorne Drug Company, Boston.	
5947-S	A. E. Lynch & Co., Cambridge.	

BLUE OINTMENT.

7820-R	Brewers Drug Store, Springfield.	
6111-S	Curtis & Ellis, Lynn.	
6143-S	Davis & Young, Lynn.	
7368-R	Forrests Drug Store, Lawrence.	
7768-R	Hearn's Drug Store, Quincy.	
7884-R	Geo. O. Levasseur, Worcester.	
6119-S	John M. Nelson, Lynn.	
6121-S	John M. Nelson, Lynn, ...	H. K. Mulford Company, Pennsylvania.
6145-S	Riker Jaynes Company, Lynn.	
7370-R	A. F. Ryder, Lawrence.	

ESSENCE OF PEPSIN.

q 13062	C. R. Hillburg & Co., Campello.	

ELIXIR OF POTASSIUM BROMIDE.

5705-S	Green's Cut-price Drug Store, Worcester.	

MERCURIAL OINTMENT.

6123-S	Davis & Young, Lynn.	

OLIVE OIL.

q 13133	J. E. Sullivan & Co., Rockland.	
7031-S	W. H. Willis, Reading.	

QUININE PILLS.

q 12781	People's Drug Store, Taunton.	
q 13135	J. E. Sullivan & Co., Rockland.	

ROCHELLE SALTS.

Number of Sample.	DEALER.	Wholesaler or Manufacturer.
7914-R	Victor Bergwall, Worcester.	
7912-R	E. J. Churchill Company, Worcester.	

Samples of Drugs in which No Adulteration was detected — Continued.

SPIRIT OF NITROUS ETHER.

23591	Barker Pharmacy, Springfield.	
q 13178	R. E. Bellows Company, Boston.	
23553	A. P. Coffin, Taunton.	
6113-S	Curtis & Ellis, Lynn.	
q 13139	J. J. Estes, Rockland.	
7890-R	W. L. Davis Company, Worcester.	
23566	L. D. Drury, Boston.	
q 13068	H. H. Dudley, Brockton.	
7876-R	Charles E. Ames, Somerville.	
7772-R	Eastern Drug Company, Boston.	
q 13118	W. F. Eaton, Cambridge.	
6125-S	Economical Drug Store, Roxbury.	
7878-R	Edward Edwards, Somerville.	
q 13143	J. C. Fuller, Plymouth.	
q 13123	Vernon Laing, Cambridge.	
q 13148	W. H. Leach & Co., Plymouth.	
q 13119	J. D. Lynch Drug Company, Cambridge.	
q 13126	J. T. Mahoney, Grove Hall.	
6141-S	Horace C. Page, Lowell.	
7906-R	People's Pharmacy, Worcester.	
q 13172	W. A. Phillips, Rockland.	
7832-R	Charles V. Ryan, Springfield.	
6131-S	Jesse W. Sargeant, Malden.	
7892-R	N. R. Scott & Son, Worcester.	
q 13122	I. L. Thompson, Cambridge.	
q 13180	Tremont Pharmacy, Brockton.	
7870-R	Harry F. Weir, Medford.	
7033-S	W. H. Willis, Reading.	
6153-S	Middlesex Drug Company, Stoneham.	

SPIRIT OF ANISE.

7900-R	Buffington Pharmacy, Worcester.	
7828-R	Jaynes Drug Company, Springfield.	
q 13157	E. L. Niquette & Co., Northampton.	
q 13154	H. A. Wiswell, Northampton.	

SPIRIT OF CAMPHOR.

23541	E. G. Bossom, Boston.	
23562	Comfort Pharmacy, Boston.	
6117-S	Curtis & Ellis, Lynn.	
23565	L. D. Drury, Boston.	
23540	H. D. Duggan, Boston.	
23563	Economical Drug Company, Boston.	
23548	F. O. Gould, Boston.	
23564	Hawthorne Drug Company, Boston.	
23593	Leonard & Co., Springfield.	
7826-R	A. E. Lerche, Springfield.	
7670-R	Mitchell & Gaynor, Malden.	
23544	A. D. Ross, Boston.	
23595	C. V. Ryan, Springfield.	
23545	C. A. Siegemund, Boston.	
6139-S	Geo. L. Wilson, Lowell.	

SPIRIT OF PEPPERMINT.

Number of Sample.	DEALER.	Wholesaler or Manufacturer.
23592	Barker Pharmacy, Springfield.	
q 13146	Carver's Pharmacy, Plymouth.	
23552	A. P. Coffin, Taunton.	
q 13140	Cooper Drug Store, Plymouth.	
q 13150	Cooper Drug Store, Plymouth.	

Samples of Drugs in which No Adulteration was detected — Concluded.

SPIRIT OF PEPPERMIFT — *Continued.*

Number of Sample.	DEALER.	Wholnsaler or Manufacturer.
23542	Copley Square Pharmacy, Boston.	
7718-R	Charles O. Currier, Stoneham.	
q 13067	H. D. Dudley, Brockton.	
q 13138	J. J. Estes, Rockland.	
q 13142	J. C. Fuller, Plymouth.	
23523	C. W. Freeman, Chelsea.	
23547	Frank O. Gould, Boston.	
23550	Hanson & Co., Taunton.	
23543	Hoffman Pharmacy, Boston.	
q 13149	W. H. Leach & Co., Plymouth.	
q 13145	W. S. Loring, Plymouth.	
q 13120	J. D. Lynch Drug Company, Cambridge.	
q 13125	J. T. Mahoney, Roxbury.	
q 13136	Daniel O'Brien, Rockland.	
q 13065	James E. O'Connor, Brockton.	
q 13129	W. A. Phillips, Rockland.	
23551	Ripley & Briggs, Taunton.	
23546	C. A. Siegemund Company, Boston.	
q 13064	Tremont Pharmacy, Cambridge.	

SPIRIT OF WINTERGREEN.

q 13155	F. A. Brandle, Northampton.	
7908-R	Liggett's Drug Store, Boston.	
6091-S	Shepard & Norwell Company, Boston.	

TINCTURE OF IODINE.

23561	Comfort Pharmacy, Boston.	
6115-S	Curtis & Ellis, Lynn.	
q 13117	W. F. Eaton, Cambridge.	
23576	Economical Drug Company, Boston.	
7904-R	Green the Druggist, Worcester.	
23594	Leonard & Co., Springfield.	
7716-R	Middlesex Drug Company, Stoneham.	
7874-R	P. F. O'Hare, Malden.	
q 13131	W. A. Phillips, Rockland.	
7037-S	C. Fred Wright, Boston.	

TINCTURE OF GINGER.

23487	John M. Dean, Fall River.	
23371	Siskind's Pharmacy, Roxbury.	

WITCH HAZEL.

23555	Cobb, Bates & Yerxa, Taunton, ...	Grocer's Specialty Company, Boston.
7930-R	Family Wine Store, Boston.	

PROPRIETARY DRUGS.

5711-S	Oxidaze Tablets, Buffington Pharmacy, Worcester.	
7298-R	Col-Don's Catarrh Cream, Coleman & Donovan, Boston.	
7812-R	Kof-Ezers, Drug Store, 570 Main Street, Pittsfield,	Whitman Chemical Company, Boston.

Samples of Drugs which upon Examination were found to be Labeled in Accordance with Law.

DENATURED ALCOHOL.

Number of Sample.	DEALER.	Wholesaler or Manufacturer.
23521	Paint Supply Company, Chelsea, ...	Paint Supply Company, Chelsea.
23322	Russell & Co., Holyoke, ...	Russell & Co., Holyoke.

PROPRIETARY DRUGS.

7894–R	Cough Cubes, Wm. L. Davis Company, Worcester.[1]	
7582–R	Field's Indigestion Remedy, A. S. Field, Lowell.[2]	

Samples of Drugs which upon Examination were found to be adulterated.

QUININE PILLS.

Number of Sample.	DEALER.	Wholesaler or Manufacturer.	Per Cent. of required Strength.
23330	Charles E. Bardwell, Holyoke, ...	– –	1.71[3]
q 12975	M. G. Hirshon, Worcester, ...	– –	1.85[3]
q 12972	Levasseur Pharmacy, Worcester, . . .	– –	1.76[3]

SPIRIT OF ANISE.

q 13176	Walter N. Baker, Dorchester, ...	– –	81
6109–S	Curtis & Ellis, Lynn, ...	– –	40
q 13066	James E. O'Connor, Brockton, ...	– –	80
q 13181	James E. O'Connor, Brockton, ...	– –	81

SPIRIT OF NITROUS ETHER.

7886–R	Victor Bergwall, Worcester, ...	– –	57
q 13189	Harry Braconier, Campello, ...	– –	63
q 13147	Carver's Pharmacy, Plymouth, ...	– –	81
q 13151	Cooper Drug Store, Plymouth, ...	– –	83
q 13141	Cooper Drug Store, Plymouth, ...	– –	83
q 13121	Cunningham Drug Store, Cambridge, . .	– –	51
q 13188	Essex Pharmacy, Brockton, ...	– –	81
q 13061	C. H. Hillburg & Co., Campello, . . .	– –	80
q 13144	W. S. Loring, Springfield, . –	– –	80
q 13137	Daniel O'Brien, Rockland, ...	– –	69
q 13063	Tremont Pharmacy, Cambridge, . . .	– –	72
q 13132	W. A. Phillips, Rockland, ...	– –	68

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[1] Contained opium.

[2] Contained alcohol.

[3] Grains of quinine sulphate per pill.

Samples of Drugs which upon Examination were found to be adulterated — Concluded.

SPIRIT OF PEPPERMINT.

Number of Sample.	DEALER.	Wholesaler or Manufacturer.	Per Cent. of required Strength.
q 13177	R. E. Bellows Company, Neponset,	– –	46
q 13129	W. A. Phillips, Rockland,	– –	75

SPIRIT OF WINTERGREEN.

Number of Sample.	DEALER.	Wholesaler or Manufacturer.	Per Cent. of required Strength.
q 13156	E. L. Niquette & Co., Northampton,	– –	80

TINCTURE OF IODINE.

Number of Sample.	DEALER.	Wholesaler or Manufacturer.	Per Cent. of required Strength.
6127–S	Comfort Pharmacy, Boston,	– –	85

TINCTURE OF VANILLA (CONTAINED SOLUTION OF VANILLIN AND COUMARIN).

Number of Sample.	DEALER.	Wholesaler or Manufacturer.	Per Cent. of required Strength.
q 13033	Revere Pharmacy, Revere,	– –	–

Samples of Milk which upon Examination were found to be adulterated.

Number of Sample.	Name of Dealer, Wholesaler or Producer.	Results of Analyses.
7726–R	Manuel J. Avila, Lowell,	Total solids, 11.32 per cent.; fat, 3.70 per cent.; contained added water.
7728–R	Manuel J. Avila, Lowell,	Total solids, 11.30 per cent.; fat, 3.50 per cent.; contained added water.
7730–R	Manuel J. Avila, Lowell,	Total solids, 11.32 per cent.; fat, 3.50 per cent.; contained added water.
7732–R	Manuel J. Avila, Lowell,	Total solids, 11.36 per cent.; fat, 3.50 per cent.; contained added water.
7734–R	Manuel J. Avila, Lowell,	Total solids, 11.34 per cent.; fat, 3.60 per cent.; contained added water.
7736–R	Manuel J. Avila, Lowell,	Total solids, 11.38 per cent.; fat, 3.50 per cent.; contained added water.
7738–R	Manuel J. Avila, Lowell,	Total solids, 11.28 per cent.; fat, 3.40 per cent.; contained added water.
7740–R	Manuel J. Avila, Lowell,	Total solids, 11.26 per cent.; fat, 3.60 per cent.; contained added water.
7742–R	Manuel J. Avila, Lowell,	Total solids, 11.30 per cent.; fat, 3.50 per cent.; contained added water.
7744–R	Manuel J. Avila, Lowell,	Total solids, 11.28 per cent.; fat, 3.60 per cent.; contained added water.
7746–R	Manuel J. Avila, Lowell,	Total solids, 11.36 per cent.; fat, 3.60 per cent.; contained added water.
7748–R	Manuel J. Avila, Lowell,	Total solids, 11.38 per cent.; fat, 3.50 per cent.; contained added water.
7750–R	Manuel J. Avila, Lowell,	Total solids, 11.34 per cent.; fat, 3.65 per cent.; contained added water.
7752–R	Manuel J. Avila, Lowell,	Total solids, 11.26 per cent.; fat, 3.50 per cent.; contained added water.

Samples of Milk which upon Examination were found to be adulterated — Concluded.

Number of Sample.	Name of Dealer, Wholesaler or Producer.	Results of Analyses.
7754-R	Manuel J. Avila, Lowell,	Total solids, 11.28 per cent.; fat, 3.50 per cent.; contained added water.
7756-R	Manuel J. Avila, Lowell,	Total solids, 11.20 per cent.; fat, 3.50 per cent.; contained added water.
23527	M. Marder, New Bedford,	Total solids, 13.72 per cent.; fat, 5.40 per cent.; contained added water.
23494	Peckham Dairy Company, Fall River,	Total solids, 11.86 per cent.; fat, 4.00 per cent.; contained added water.
23510	Peckham Dairy Company, Fall River,	Total solids, 10.06 per cent.; fat, 3.10 per cent.; contained added water.
23511	Peckham Dairy Company, Fall River,	Total solids, 12.34 per cent.; fat, 4.40 per cent.; contained added water.
23530	H. A. Voghel, New Bedford,	Total solids, 11.32 per cent.; fat, 2.40 per cent.; proteins, 3.14 per cent.; skimmed milk.

COLD STORAGE.

CHAPTER 652, ACTS OF 1912.

During the month of February, 1914, the following convictions were secured on account of the absence of the sign, "Cold Storage Goods Sold Here"; also, for representing cold-storage goods as fresh: —

No.	Date.	NAME OF DEFENDANT.	Place.	Result.
1	Feb. 11, 1914	Morris Lampke,	Chelsea,	Case filed.
2	Feb. 19, 1914	Thomas Simonian,	Beachmont,	Fined.
3	Feb. 25, 1914	Westbrook K. Morrill,	Brockton,	Fined.

Total amount of fines imposed, $20.

REPORT ON THE PROSECUTIONS CONCERNING SALE OF EGGS TAKEN FROM COLD STORAGE.

CHAPTER 538, ACTS OF 1913.

The following convictions were secured in February, 1914, because eggs "offered or exposed for sale" were not properly marked in accordance with the rules and regulations made by the State Board of Health: —

No.	Date.	NAME OF DEFENDANT.	Place.	Result.
1	Feb. 19, 1914	Thomas Simonian, . . .	Beachmont, .	Case filed.
2	Feb. 25, 1914	Westbrook K. Morrill, . .	Brockton, .	Case filed.
3	Feb. 25, 1914	Clarence E. Chamberlain, . .	Brockton, .	Fined.

Fine imposed, $10.

SLAUGHTERING AND MEAT INSPECTION.

During the month of February, 1914, the following convictions were secured because the inspector was not present at the time of slaughter, and the meat was unstamped: —

No.	Date.	NAME OF DEFENDANT.	Place.	Result.
1	Feb. 3, 1914	John J. Scannell, ...	Woburn, .	Case filed.
2	Feb. 4, 1914	August Young, ...	Lexington, .	Fined.
3	Feb. 5, 1914	Charles Dailey, ...	Lexington, .	Fined.[1]
4	Feb. 17, 1914	Sam Samuels, ...	Pittsfield, .	Fined.
5	Feb. 17, 1914	Isadore Straskin, ...	Pittsfield, .	Fined.
6	Feb. 25, 1914	Benjamin Lipsky, ...	Stoughton, .	Fined.

[1] Appealed.

Total amount of fines imposed, $110.

The licenses of Messrs. Young and Lipsky were revoked in accordance with paragraph 15 of the slaughtering laws of Massachusetts.

In addition to the above, Z. Kantrovitz of Pittsfield was found guilty of slaughtering without a license. Fined $10.

REPORT ON INSPECTION OF DAIRIES.

During the month of February, 1914, 115 dairies were examined in the following places: —

Place.	Number examined.	Class AA.	Class A.	Class B.	Unclean Dairies.	Per Cent. Clean Dairies.
Dudley,	36	–	3	29	4	88.89
Holland,	1	–	–	1	–	100.00
Monson,	20	–	1	19	–	100.00
Palmer,	12	–	–	9	3	75.00
Pittsfield,	25	–	1	10	14	44.00
Southbridge,	13	–	2	11	–	100.00
Sturbridge,	3	–	–	3	–	100.00
Wales,	5	–	–	2	3	40.00

Total number of dairies examined,	115
Total number of commendable dairies,	91
Total number of unclean dairies,	24
Percentage of dairies which passed inspection,	79.13

In addition to the above, 42 dairies were visited at which the sale of milk had been discontinued, 10 of which are making butter; also, 9 dairies were reported as producing less than 20 quarts of milk a day.

Included in the total number of dairies visited were 27 which had recently started in the milk-producing business and were inspected for the first time.

The names of the owners of the dairies found to be worthy of commendation follow: —

DUDLEY.

Class A.

	Per Cent.		Per Cent.
Conant, Samuel M.,	79	Hall, George F.,	87
Easterbrook Brothers,	82		

Class B.

	Per Cent.
Babcock, F. E.,	67
Bair, R. J. M.,	64
Ballard, L.,	68
Bandalow, Fred,	64
Bateman, (Mrs.) A. T.,	66½
Bateman, Frank W.,	68
Bates, Everett A.,	74½
Bisco, A.,	67
Bosworth, A. N.,	66
Brillowsky, Thomas & Felix,	66
Conant, Samuel M.,	73
Deary, C. H.,	68
Deon, F. E.,	74
Downey, J. H.,	70
Fish, George H.,	71
Gadska, August,	70½
Harwood, William H. (Estate),	74
Henry, Thomas,	66
Ide, M. W.,	63
Jacobs, C. A.,	70
Koebke, Adolf,	72
Kosyowski, Frank,	66
Marsh, Henry L.,	72
Mason, S. F.,	74
Niesczewski, John,	61
Sylvester, Joseph,	63
Thatcher, Job L.,	68
Truell, George B.,	61½
Wielock, Jacob,	70

HOLLAND.

Class B.

	Per Cent.
Morse, Arthur E.,	64½

MONSON.

Class A.

"Town Farm,"	75

Class B.

Blanchard, Cady,	69
Blodgett, R. N.,	64
Burdick, A. H.,	72
Carew, J. P.,	70
Carpenter Brothers,	69
Fila, Joseph,	62
Foley, Cornelius,	66
Kaspozak, Joseph,	69
Moulton, (Mrs.) H. D.,	66
Moulton, H. T.,	65
Noble, H. M.,	72½
Pease, E. G.,	65
Powers, E. L.,	68½
Reimers, William,	64½
Rindge, Frederick,	71
Stebbins, Lester,	66½
Stebbins, Merrill,	60½
Stebbins, S. M.,	65½
Tucker, Wilson M.,	69

PALMER.

Class B.

Austin, P. J.,	67
Coulter, A. & W.,	67
Domey, (Mrs.) Mary,	62
Hamilton, John O.,	72½
Harness, John,	67
Lawlor, M. F.,	63½
Mahoney, Dennis,	70
Phinney, Edgar,	69½
Socha, Albert,	65

PITTSFIELD.

Class A.

	Per Cent.
Noble, W. S.,	77

Class B.

	Per Cent.		Per Cent.
Benz, Charles,	64	O'Brien, Joseph,	69
Elmer, Walter,	64	Scace, William,	63
Gale, (Mrs.) A. D.,	63	Teot, Joseph,	65
Jacoby, M.,	64	Wehry, August,	65
Milton, W. F.,	72	Weller, E.,	66

SOUTHBRIDGE.

Class A.

Cheney, Herman S.,	88	Clemence Brothers,	78

Class B.

Boardman, C. R.,	66	Morse, Frank S.,	63½
Charron, Wilfred,	74	Morse, W. P.,	65½
Edwards, E. H.,	72	Piehl, Emil C.,	61½
Finlay, William J.,	68½	Shepard, John C.,	63
Keenan, John & Son,	72½	Wadleigh, H. C.,	73½
McKinstry, Albert J.,	68		

STURBRIDGE.

Class B.

Cutting, William E.,	60	Tremblay, Theophile,	61½
McGilpin, Alfred,	68		

WALES.

Class B.

Lynch, James F.,	68½	Peck, William M.,	62½

Classification of Dairies.

AA = 90 to 100 per cent.
A = 75 to 90 per cent.
B = 60 to 75 per cent.
Below Class B (60 per cent.), unclean or dirty.

NEW LEGISLATION.

ACTS OF 1914, CHAPTER 67.

AN ACT RELATIVE TO THE MANUFACTURE AND SALE OF ICE CREAM.

SECTION 1. Section one of chapter seven hundred and forty-three of the acts of the year nineteen hundred and thirteen is hereby amended by striking out the word "and", in the first line, and inserting in place thereof the word: — or, — so as to read as follows: — *Section 1.* Substances manufactured or sold under the general name of "ice cream" shall contain not less than seven per cent of milk fat, and if flavored with fruit shall be flavored only with sound, clean, matured fruit, and if containing nuts shall contain only sound, matured, non-rancid nuts.

SECTION 2. Said chapter seven hundred and forty-three is hereby further amended by striking out section two and inserting in place thereof the following new section: — *Section 2.* Whoever, by himself or by his servant or agent, or as the servant or agent of another person, manufactures, exposes for sale, or has in his custody or possession with intent to sell, or sells, under the general name of "ice cream", substances in violation of section one of this act shall be punished by a fine not exceeding one hundred dollars. [*Approved February 21, 1914.*

ACTS OF 1914, CHAPTER 90.

AN ACT RELATIVE TO THE PUBLICATION OF REGULATIONS OF BOARDS OF HEALTH IN TOWNS.

Section fourteen of chapter seventy-five of the Revised Laws is hereby amended by striking out the words "if there is no such newspaper", in the second and third lines, — so as to read as follows: — *Section 14.* The board of health of a town shall publish all regulations made by it in a newspaper of its town, or shall post them up in a public place in the town. Such publication or posting shall be notice to all persons. [*Approved February 25, 1914.*

SEWAGE TREATMENT BY AËRATION AND CONTACT IN TANKS CONTAINING LAYERS OF SLATE.[1]

Lawrence Experiments, if they can be applied on Large Scale, suggest Important Advances in Sewage-treatment Practice.

BY H. W. CLARK, CHEMIST, AND GEORGE O. ADAMS, ASSISTANT CHEMIST, MASSACHUSETTS STATE BOARD OF HEALTH.

Partial purification, or even so-called complete purification, of sewage may be accomplished upon much smaller areas than have hitherto been believed possible and at much lower cost if the results of two years' experimental work at the Lawrence Experiment Station are found to be applicable on a large scale.

In the Engineering Record of June 28, 1913, page 715, an article was presented by us describing some experiments upon the aëration of sewage, especially in tanks containing layers of slate, and the results of this treatment as an aid to increased rates of filtration were described. It was stated briefly in that article that the great changes in sewage resulting from treatment in the Lawrence tank were due to aëration combined with contact of the sewage with growths upon the slate. These growths and the resulting clarification of the sewage occurred under aërated conditions — with dissolved oxygen present in the sewage and circulation of the sewage through the tank caused by the currents of air.

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[1] Reprinted from Engineering Record, Feb. 7, 1914.

While aëration of sewage has been investigated from time to time at the Lawrence Experiment Station, this most recent work was begun nearly two years ago, and as it has progressed it has become evident that under the conditions prevailing in this Lawrence tank a considerable purification of sewage can be obtained without filtration when the tank is constructed and operated as described in our previous article. This purification takes place, moreover, both when stale sewage, such as comes to the experiment station, is treated and in fresh sewage before much decomposition has set in. This has been proved by our experimental work.

Period of Aëration.

The requisites for such purification are dissolved oxygen, circulation of the sewage for a certain period of time, and sufficient surface of slate or other material upon which abundant growths may occur. The slate walls in the Lawrence tank are at the present time vertical and about 1 in. apart, and only about three-fourths of the tank contain them. The tank has been operated daily for twelve months, and the time of aëration of the sewage has been reduced to five hours for each volume treated. This means, of course, that with a tank holding 1,000,000 gal., from 4,000,000 to 5,000,000 gal. of sewage could be treated each day. Clear sewage can be drawn from the tank as soon as the aëration is stopped, as by that time nearly all the suspended matter has been collected by the growth on the slates.

The last inch or so in depth of sewage contains all the sludge which may have become detached from the slates and its suspended matters are easily separated from the liquid. This sludge is practically odorless, has lost all offensive characteristics common to sewage sludge, and earlier in the experiment, when the period of aëration was ten hours or more, the aërated sewage was frequently non-putrescible, as shown by incubation, and even with the comparatively short period of aëration now given the sewage odor has disappeared.

A considerable portion of the increase in stability of sewage gained during this treatment is, however, due to coagulation and clarification rather than to absorption of dissolved oxygen, as shown by the fact that samples of the raw sewage, such as were treated in this tank, when diluted with distilled water and incubated five hours (the time of aëration in the tank) at the same temperature as the sewage in the tank (60–65 deg. Fahr.), absorb less than 1 part of oxygen per 100,000 parts. This is not a sufficient amount to account for the purification occurring in the tank.

Amount and Cost of Air.

Air is used at present at the rate of 25,000 cu. ft. per hour per 1,000,000 gal. of sewage 5 ft. in depth. With better methods of distributing the air this volume of air might be reduced or the volume of sewage considerably increased. At present the air is applied through a perforated pipe at the bottom of the tank. The cost of power alone for such aëration, on a basis of 4 cents per kilowatt-hour, as estimated by ourselves and by an expert of a prominent engineering firm, would be less than $2 per 1,000,000 gal. for 5 hours' aëration, using 25,000 cu. ft. per hour. These figures of costs are about three-fourths as high as those of Black and Phelps given in their report upon "Treatment of Sewage Entering New York Harbor." The work of Black and Phelps and others, moreover, was simply upon aëration, while the treatment in the Lawrence tank not only aërates the sewage, but, as stated previously, collects much suspended matter, and, what is more important, coagulates much of the colloidal matter present in the sewage. The matters removed from the sewage by the action in the Lawrence tank collect upon the slates in jelly-like masses, often $\frac{3}{8}$ in. or more in thickness, slough off from time to time and are easily removed from the bottom of the tank.

Previous Investigations.

In previous years much work has been done at Lawrence and elsewhere upon the aëration of sewage. The late Col. George E. Waring probably did the first work in America upon a working scale along this line, and constructed at Wayne, Pa., somewhat more than twenty years ago, a sewage-disposal system which included aëration as one of its important features. At these works, as then operated, the sewage, after passing through screens, entered a receiving reservoir with a capacity of 90,000 gal. Its treatment in this reservoir was as follows: —

> Two Barr duplex pumps, with a capacity of about 22,000 gal. each per hour, or 525,000 gal. per day, force the sewage up the hill on the left of the creek to the distributing wall. This 12-in. force main is of spiral weld-steel pipe, is 480 ft. long, and has a rise of about 100 ft. The lower end of the force main was placed above the ground to obtain a grade that would allow it to drain dry through the aërating pipe mentioned below. Both pumps are started when

the screening reservoir is nearly full, and, as designed, the sewage is first delivered back into the receiving tank through a 4-in. aërating pipe, the object being to deodorize the sewage and increase its oxygen. Aëration is maintained for from 60 to 90 minutes, after which the valve in the aërating pipe is closed and the sewage is delivered into the well. (Rafter and Baker, 1894, "Sewage Disposal in the United States," page 535.)

TREATING SEWAGE BY AËRATION.

A series of experiments on the treatment of sewage by aëration was made for the Metropolitan Board of Works, London, by Dr. A. Dupre and W. J. Dibdin at about this period, and the results are given by Rafter and Baker. A table is given showing the analyses of the sewage before and after aëration, and the statement is made that it is evident from the analyses that "aëration had but little effect upon the sewage."

The same conclusion was reached in the experiments by S. K. Hine and are recorded in a paper entitled "Note on the Practical Observation of Organic Matter in Water," by Prof. W. P. Mason and S. K. Hine ("Journal" of American Chemical Society, Vol. 14, page 7). These experiments were presented as a graduating thesis at Rensselaer Polytechnic Institute in June, 1892. In these experiments "mixtures of sewage and water were placed in tin cans or glass-stoppered bottles, the receptacle being not over half filled, and the can or bottle was then fastened to the connecting rod of a horizontal steam engine of 10-in. stroke and the engine run at 75 r.p.m., so that in an hour the receptacle was shaken 9,000 times and traveled 1.25 miles. The samples were shaken from 13 to 60 hours and twenty-four samples were tried, analyses being made before and after shaking."

The paper states that "examination and results show that the amount of oxidation which took place during agitation of the water was very trifling, a finding entirely in accordance with Prof. Lee's observations of the waters of the Niagara River before and after passing Niagara Falls. Direct oxidation does not seem to be a factor of any considerable importance in the purification of polluted waters."

Dr. T. M. Drown, for many years chemist to the Massachusetts State Board of Health, after experiments with natural waters and with water to which a small amount of sewage was added, concluded that "the oxidation of organic matter in water is not hastened by vigorous agitation with air or by air under pressure."

The object of these early studies was, as the quotations show, the oxidation of organic matter by the air with which it was agitated or placed in contact, and as these matters were changed little, if any, by such aëration, as shown simply by ammonia determinations, the process was considered to be ineffective and a failure. Similar results were obtained in this laboratory on aërating sewage in clean bottles, and it was only when the bottles became coated inside with a "growth" that any appreciable clarification was obtained.

Notable studies upon aëration have in recent years been made by Black and Phelps and described by them in their report mentioned above. In all their work, however, as in the previous studies mentioned above, aëration alone was tried, and the object of their study was to observe and note the changes induced by passing certain volumes of air through certain volumes of sewage. By such aëration Black and Phelps showed that certain changes in sewage occur which increase its stability or rather free it more or less from its unstable, quickly putrefying elements.

Results of Experiments.

The present work at Lawrence, however, is essentially different from any of the preceding work along this line and results in a substantial purification. A summary of the aëration work at Lawrence during the last six months shows the following results:

1. The time of aëration has been five hours, and from July 1 to Sept. 1, 1913, air was applied at the rate of 100,000 cu. ft. and thereafter at the rate of 25,000 cu. ft. for sewage 5 ft. in depth. About July 1 the slates were changed from a horizontal to a vertical position. At that time there was from ½ to 1 in. in thickness of growth and sludge on the slates. This matter was fermenting but inoffensive.

2. The comparative clarification by settling tanks, by chemical precipitation and by the Lawrence aërating and coagulating tank is shown in Table 1. The settled sewage was given a period of twelve hours for sedimentation, the precipitated sewage received 1000 lb. of aluminum sulphate per 1,000,000 gal. and four hours for subsequent

Table 1. — *Comparative Results of Sedimentation, Chemical Precipitation and Lawrence Tank Treatment.*

	Per Cent. Reduction of —			
	Albuminoid Ammonia.		Solids.	
	In Suspension.	In Solution.	Total Suspension.	Volatile in Solution.
Settled sewage,	52	16	46	8
Precipitated sewage,	68	28	76	24
Aërated sewage — Lawrence tank,	80	28	87	24

sedimentation. The treatment in the slate tank was for a five-hour period. The average of six months' results is given in the table, and the per cent. reduction refers to the removal of matters present in the raw or untreated sewage. It will be noticed that 87 per cent. of the total suspended matters has been removed by the aërating-tank treatment and that the removal of organic matters in solution and semi-solution (colloidal matter) is three times as great by this treatment as by prolonged sedimentation.

3. The rates of the trickling filter to which aërated sewage was applied were as follows, in gallons per acre daily: July 1, 8,000,000; Aug. 1, 8,500,000; Aug. 10, 9,000,000; Oct. 1 to date, 10,000,000.

Table 2. — *Average Analysis for Six Months of Raw Sewage, Aërated Sewage and Effluent from Trickling Filter (Parts per 100,000).*

	Ammonia.			Kjeldahl Nitrogen.		Nitrogen as —		Oxygen consumed.	Chlorine.
		Albuminoid.							
	Free.	Total.	In Solution.	Total.	In Solution.	Nitrates.	Nitrites.		
Raw sewage, ...	3.62	.57	.32	1.04	.62	–	–	3.52	13.60
Aërated sewage, ...	3.28	.28	.23	0.49	.43	–	–	1.89	12.50
Effluent from trickling filter, .	1.25	.12	.08	0.28	–	1.78	.0523	1.35	12.90

The filter is 10 ft. deep and contains crushed stone passing a 2-in. ring and held back by a 1-in. ring.

The effluent from the trickling filter has been stable at all times, and clear after the typical brown sediment has settled.

Conclusions.

It is evident from the results of this work now covering two years' observation and experiment that there is much of promise in it; that if successful upon a large scale a partial purification, or even so-called complete purification, of sewage may be accomplished upon much smaller areas than has hitherto been believed possible, and also at a much lower cost. The cost of power for aërating and coagulating the sewage in the Lawrence tank should not average more than from one-third to one-fifth as great as the cost for chemicals in chemical-precipitation treatment, and the aërating tank produces a somewhat better purified effluent. The sludge liquor in the tank is also much less in volume (that is, contains less water) and more easily handled than the sludge liquor from chemical precipitation. It is also practically odorless, owing undoubtedly to the aërobic conditions prevailing in the tank. It is possible, moreover, that agitation and aëration in this slate tank might be accomplished more cheaply than by the method used in these experiments. It is also evident, as described in our previous paper, that the effluent from this tank can be purified upon trickling filters at a much higher rate than can sewage from settling or chemical-precipitation treatment. This is probably due partly to the better clarification of the sewage and partly to its decreased oxygen requirement. The fact, also, that the sewage after treatment has lost all offensive odor is of great importance, assuring filtration without nuisance. Moreover, aëration for ten hours in this tank has often produced an effluent low in free and albuminoid ammonia, stable and of a character equal to many of the effluents from the cruder methods of filtration.

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Approved by
The State Board of Publication.

RETURNS OF DISEASES.

Cases of Diseases declared by the State Board of Health to be Dangerous to the Public Health.

[Under the provisions of section 52 of chapter 75 of the Revised Laws.]

DISEASE.	Week ending —				
	Mar. 7.	Mar. 14.	Mar. 21.	Mar. 28.	Total.
Diphtheria,	137	143	122	152	554
Measles,	303	280	310	385	1,278
Scarlet fever,	340	444	396	403	1,583
Typhoid fever,	30	26	20	27	103
Tuberculosis, pulmonary,	154	133	124	152	563
Tuberculosis, meningitis,	3	4	5	6	18
Tuberculosis, other forms,	5	10	13	8	36
Cerebro-spinal meningitis,	2	2	2	5	11
Whooping cough,	73	105	98	83	359
Varicella,	99	108	132	143	482
Ophthalmia neonatorum,	72	52	49	48	221
Anterior poliomyelitis,	2	4	2	–	8
Smallpox,	–	1	1	1	3
Trachoma,	2	1	2	4	9
Trichinosis,	–	–	–	1	1
Tetanus,	–	–	1	–	1

Cases of Infectious Diseases not included in the Above Table.

[Cases not notifiable under the provisions of section 52 of chapter 75 of the Revised Laws.]

DISEASE.	Week ending —				
	Mar. 7.	Mar. 14.	Mar. 21.	Mar. 28.	Total.
Mumps,	18	27	8	16	69
Erysipelas,	–	1	1	1	3
Anthrax,	–	1	–	–	1

RETURNS OF DEATHS.

Deaths from Diseases declared by the State Board of Health to be Dangerous to the Public Health in Cities and Towns of More than 10,000 Population.

[Under the provisions of chapter 210, Acts of 1913.]

Week ending March 7, 1914.

CITIES AND TOWNS.	Population. Census for 1910.	Total Number reported.	Tuberculosis, Pulmonary (or not classified).	Tuberculous Meningitis.	Tuberculosis, Other Forms.	Diphtheria.	Typhoid Fever.	Scarlet Fever.	Measles.	Whooping Cough.	Cerebro-spinal Meningitis.
Boston,	686,092	27[1] 34[3]	20[1] 21[2]	1[1] 2[2]	- 1[2]	3[1] 5[2]	- -	1[1] 2[2]	- -	1[1] 1[2]	1[1] 1[2]
Worcester,	145,986	5	4	-	1	-	-	-	-	-	-
Fall River,	119,295	7	3	1	1	1	1	-	-	-	-
Lowell,	106,294	4	3	-	-	2	-	-	-	1	-
Cambridge,	104,839	4	2	-	-	1	-	-	-	-	-
New Bedford,	96,652	4	2	1	-	-	-	1	-	-	-
Lynn,	89,336	3	1	-	-	1	-	-	-	-	-
Springfield,	88,926	1	1	-	-	-	-	-	-	-	-
Lawrence,	85,892	1	2	-	-	-	-	-	-	-	-
Somerville,	77,236	2	3	-	-	-	-	-	-	-	-
Holyoke,	57,730	3	-	-	-	-	-	-	-	-	-
Brockton,	56,878	1	1	-	-	1	-	-	-	-	-
Malden,	44,404	2	-	-	-	-	-	1	-	-	-
Haverhill,	44,115	-	-	-	-	-	-	-	-	-	-
Salem,	43,697	-	1	-	-	-	-	-	-	-	-
Newton,	39,806	2	1	-	-	-	1	-	-	-	-
Fitchburg,	37,826	1	2	-	-	-	-	-	-	-	-
Taunton,	34,259	2	-	-	-	-	-	-	-	-	-
Everett,	33,484	-	1	-	-	-	-	-	-	-	-
Quincy,	32,642	1	1	-	-	-	-	-	-	-	-
Chelsea,	32,452	2	1	-	-	-	-	1	-	-	-
Pittsfield,	32,121	2	1	1	-	-	-	-	-	-	-
Waltham,	27,834	1	-	-	-	-	-	-	-	-	-
Brookline,	27,792	-	-	-	-	-	-	-	-	-	-
Chicopee,	25,401	1	-	-	-	-	-	1	-	-	-
Gloucester,	24,398	-	-	-	-	-	-	-	-	-	-
Medford,	23,150	1	1	-	-	-	-	-	-	-	-
North Adams,	22,019	-	-	-	-	-	-	-	-	-	-
Northampton,	19,431	1	1	-	-	-	-	-	-	-	-
Beverly,	18,650	-	-	-	-	-	-	-	-	-	-
Revere,	18,219	-	-	-	-	-	-	-	-	-	-
Leominster,	17,580	1	-	-	-	-	1	-	-	-	-
Attleborough,	16,215	1	-	-	-	-	-	1	-	-	-
Westfield,	16,044	1[1] 2[2]	1[1] 2[2]	- -	- -	- -	- -	- -	- -	- -	- -
Peabody,	15,721	-	-	-	-	-	-	-	-	-	-
Melrose,	15,715	1	-	-	-	-	-	1	-	-	-
Woburn,	15,308	1	1	-	-	-	-	-	-	-	-
Newburyport,	14,949	-	-	-	-	-	-	-	-	-	-
Gardner,	14,699	1	1	-	-	-	-	-	-	-	-
Marlborough,	14,579	-	-	-	-	-	-	-	-	-	-
Clinton,	13,075	-	-	-	-	-	-	-	-	-	-
Milford,	13,055	-	-	-	-	-	-	-	-	-	-
Adams,	13,026	-	-	-	-	-	-	-	-	-	-
Framingham,	12,948	-	-	-	-	-	-	-	-	-	-
Weymouth,	12,895	-	-	-	-	-	-	-	-	-	-
Watertown,	12,875	-	-	-	-	-	-	-	-	-	-
Southbridge,	12,592	-	-	-	-	-	-	-	-	-	-
Plymouth,	12,141	-	-	-	-	-	-	-	-	-	-
Webster,	11,509	-	-	-	-	-	-	-	-	-	-
Methuen,	11,448	-	-	-	-	-	-	-	-	-	-
Wakefield,	11,404	2	1	-	-	1	-	-	-	-	-
Arlington,	11,187	1	-	1	-	-	-	-	-	-	-
Greenfield,	10,427	-	-	-	-	-	-	-	-	-	-
Winthrop,	10,132	-	-	-	-	-	-	-	-	-	-
Total of reporting towns,	2,182,634	95	59	6	3	12	3	8	-	2	1

---

[1] Nonresidents deducted.

[2] Total deaths.

[3] Total deaths: one from tetanus.

Week ending March 14, 1914.

CITIES AND TOWNS.	Population. Census for 1910.	Total Number reported.	Tuberculosis, Pulmonary (or not classified).	Tuberculous Meningitis.	Tuberculosis, Other Forms.	Diphtheria.	Typhoid Fever.	Scarlet Fever.	Measles.	Whooping Cough.	Cerebro-spinal Meningitis.
Boston,	686,092	28	16	4	2	1	2	2	-	1	-
Worcester,	145,986	4	3	-	-	-	-	1	-	-	-
Fall River,	119,295	5	2	-	-	1	-	1	-	1	-
Lowell,	106,294	7	2	2	1	1	-	-	1	-	-
Cambridge,	104,839	4	3	-	-	-	-	-	-	1	-
New Bedford,	96,652	3	3	-	-	-	-	-	-	-	-
Lynn,	89,336	3	-	1	1	1	-	-	-	-	-
Springfield,	88,926	8	6	-	1	1	-	-	-	-	-
Lawrence,	85,892	2	-	1	-	-	1	-	-	-	-
Somerville,	77,236	3[3]	2	-	-	-	-	-	-	-	-
Holyoke,	57,730	1	-	1	-	-	-	-	-	-	-
Brockton,	56,878	-	-	-	-	-	-	-	-	-	-
Malden,	44,404	1	-	-	-	-	-	1	-	-	-
Haverhill,	44,115	-	-	-	-	-	-	-	-	-	-
Salem,	43,697	-	-	-	-	-	-	-	-	-	-
Newton,	39,806	-	-	-	-	-	-	-	-	-	-
Fitchburg,	37,826	3	1	-	2	-	-	-	-	-	-
Taunton,	34,259	2	2	-	-	-	-	-	-	-	-
Everett,	33,484	2	2	-	-	-	-	-	-	-	-
Quincy,	32,642	-	-	-	-	-	-	-	-	-	-
Chelsea,	32,452	3	3	-	-	-	-	-	-	-	-
Pittsfield,	32,121	-	-	-	-	-	-	-	-	-	-
Waltham,	27,834	-	-	-	-	-	-	-	-	-	-
Brookline,	27,792	-	-	-	-	-	-	-	-	-	-
Chicopee,	25,401	1	1	-	-	-	-	-	-	-	-
Gloucester,	24,398	-	-	-	-	-	-	-	-	-	-
Medford,	23,150	1	1	-	-	-	-	-	-	-	-
North Adams,	22,019	-	-	-	-	-	-	-	-	-	-
Northampton,	19,431	-	-	-	-	-	-	-	-	-	-
Beverly,	18,650	-	-	-	-	-	-	-	-	-	-
Revere,	18,219	-	-	-	-	-	-	-	-	-	-
Leominster,	17,580	-	-	-	-	-	-	-	-	-	-
Attleborough,	16,215	-	-	-	-	-	-	-	-	-	-
Westfield,	16,044	1[1] 2[2]	1[1] 2[2]	- -	- -	- -	- -	- -	- -	- -	- -
Peabody,	15,721	-	-	-	-	-	-	-	-	-	-
Melrose,	15,715	-	-	-	-	-	-	-	-	-	-
Woburn,	15,308	-	-	-	-	-	-	-	-	-	-
Newburyport,	14,949	-	-	-	-	-	-	-	-	-	-
Gardner,	14,699	1	-	-	-	-	-	-	-	1	-
Marlborough,	14,579	-	-	-	-	-	-	-	-	-	-
Clinton,	13,075	-	-	-	-	-	-	-	-	-	-
Milford,	13,055	-	-	-	-	-	-	-	-	-	-
Adams,	13,026	-	-	-	-	-	-	-	-	-	-
Framingham,	12,948	-	-	-	-	-	-	-	-	-	-
Weymouth,	12,895	-	-	-	-	-	-	-	-	-	-
Watertown,	12,875	-	-	-	-	-	-	-	-	-	-
Southbridge,	12,592	-	-	-	-	-	-	-	-	-	-
Plymouth,	12,141	-	-	-	-	-	-	-	-	-	-
Webster,	11,509	1	1	-	-	-	-	-	-	-	-
Methuen,	11,448	-	-	-	-	-	-	-	-	-	-
Wakefield,	11,404	-	-	-	-	-	-	-	-	-	-
Arlington,	11,187	-	-	-	-	-	-	-	-	-	-
Greenfield,	10,427	-	-	-	-	-	-	-	-	-	-
Winthrop,	10,132	-	-	-	-	-	-	-	-	-	-
Total of reporting towns,	1,931,506	85	50	9	7	5	3	5	1	4	-

---

[1] Nonresidents deducted. [2] Total deaths. [3] One death from anterior poliomyelitis.

Week ending March 21, 1914.

CITIES AND TOWNS.	Population. Census for 1910.	Total Number reported.	Tuberculosis, Pulmonary (or not classified).	Tuberculous Meningitis.	Tuberculosis, Other Forms.	Diphtheria.	Typhoid Fever.	Scarlet Fever.	Measles.	Whooping Cough.	Cerebro-spinal Meningitis.
Boston, ...	686,092	34[1] 36[2]	24[1] 25[2]	3[1] 3[2]	2[1] 2[2]	2[1] 2[2]	- -	1[1] 2[2]	- -	1[1] 1[2]	1[1] 1[2]
Worcester, ...	145,986	6	2	1	-	1	-	-	1	1	-
Fall River, ...	119,295	8	3	-	-	3	-	-	-	2	-
Lowell, ...	106,294	3	1	-	1	1	-	-	-	-	-
Cambridge, ...	104,839	9	6	-	-	1	-	-	1	1[3]	-
New Bedford, ...	96,652	6	4	-	1	-	-	-	-	1	-
Lynn, ...	89,336	2	1	-	-	1	-	-	-	-	-
Springfield, ...	88,926	3	2	-	-	1	-	-	-	-	-
Lawrence, ...	85,892	1	-	-	-	1	-	-	-	-	-
Somerville, ...	77,236	1	1	-	-	-	-	-	-	-	-
Holyoke, ...	57,730	3	2	1	-	-	-	-	-	-	-
Brockton, ...	56,878	1	1	-	-	-	-	-	-	-	-
Malden, ...	44,404	-	-	-	-	-	-	-	-	-	-
Haverhill, ...	44,115	2	2	-	-	-	-	-	-	-	-
Salem, ...	43,697	-	-	-	-	-	-	-	-	-	-
Newton, ...	39,806	-	-	-	-	-	-	-	-	-	-
Fitchburg, ...	37,826	2	-	-	-	1	-	1	-	-	-
Taunton, ...	34,259	4	3	-	-	-	-	-	-	1	-
Everett, ...	33,484	-	-	-	-	-	-	-	-	-	-
Quincy, ...	32,642	-	-	-	-	-	-	-	-	-	-
Chelsea, ...	32,452	1	1	-	-	-	-	-	-	-	-
Pittsfield, ...	32,121	-	-	-	-	-	-	-	-	-	-
Waltham, ...	27,834	1	1	-	-	-	-	-	-	-	-
Brookline, ...	27,792	-	-	-	-	-	-	-	-	-	-
Chicopee, ...	25,401	2	1	-	-	1	-	-	-	-	-
Gloucester, ...	24,398	-	-	-	-	-	-	-	-	-	-
Medford, ...	23,150	-	-	-	-	-	-	-	-	-	-
North Adams, ...	22,019	-	-	-	-	-	-	-	-	-	-
Northampton, ...	19,431	1	1	-	-	-	-	-	-	-	-
Beverly, ...	18,650	-	-	-	-	-	-	-	-	-	-
Revere, ...	18,219	-	-	-	-	-	-	-	-	-	-
Leominster, ...	17,580	2	1	-	-	-	-	1	-	-	-
Attleborough, ...	16,215	2	-	1	-	1	-	-	-	-	-
Westfield, ...	16,044	1	1	-	-	-	-	-	-	-	-
Peabody, ...	15,721	-	-	-	-	-	-	-	-	-	-
Melrose, ...	15,715	1	-	-	-	-	1	-	-	-	-
Woburn, ...	15,308	-	-	-	-	-	-	-	-	-	-
Newburyport, ...	14,949	-	-	-	-	-	-	-	-	-	-
Gardner, ...	14,699	-	-	-	-	-	-	-	-	-	-
Marlborough, ...	14,579	-	-	-	-	-	-	-	-	-	-
Clinton, ...	13,075	-	-	-	-	-	-	-	-	-	-
Milford, ...	13,055	-	-	-	-	-	-	-	-	-	-
Adams, ...	13,026	-	-	-	-	-	-	-	-	-	-
Framingham, ...	12,948	-	-	-	-	-	-	-	-	-	-
Weymouth, ...	12,895	-	-	-	-	-	-	-	-	-	-
Watertown, ...	12,875	-	-	-	-	-	-	-	-	-	-
Southbridge, ...	12,592	-	-	-	-	-	-	-	-	-	-
Plymouth, ...	12,141	-	-	-	-	-	-	-	-	-	-
Webster, ...	11,509	-	-	-	-	-	-	-	-	-	-
Methuen, ...	11,448	1	1	-	-	-	-	-	-	-	-
Wakefield, ...	11,404	-	-	-	-	-	-	-	-	-	-
Arlington, ...	11,187	-	-	-	-	-	-	-	-	-	-
Greenfield, ...	10,427	-	-	-	-	-	-	-	-	-	-
Winthrop, ...	10,132	-	-	-	-	-	-	-	-	-	-
Total of reporting towns, . .	2,013,506	99	57	9	4	14	1	4	2	7	1

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[1] Nonresidents deducted.

[2] Total deaths.

[3] One death from whooping cough and measles combined.

Week ending March 28, 1914.

CITIES AND TOWNS.	Population. Census for 1910.	Total Number reported.	Tuberculosis, Pulmonary (or not classified).	Tuberculous Meningitis.	Tuberculosis, Other Forms.	Diphtheria.	Typhoid Fever.	Scarlet Fever.	Measles.	Whooping Cough.	Cerebro-spinal Meningitis.
Boston, ...	686,092	30[1] 40[2]	15[1] 20[2]	2[1] 3[2]	- -	4[1] 6[2]	2[1] 2[2]	2[1] 4[2]	2[1] 2[2]	2[1] 2[2]	1[1] 1[2]
Worcester, ...	145,986	7	5	1	1	-	-	-	-	-	-
Fall River, ...	119,295	6	5	-	1	-	-	-	-	-	-
Lowell, ...	106,294	3	1	-	1	-	-	-	1	-	-
Cambridge, ...	104,839	5	4	1	-	-	-	-	-	-	-
New Bedford, ...	96,652	4	2	1	-	1	-	-	-	-	-
Lynn, ...	89,336	4	-	-	2	-	-	-	-	2	-
Springfield, ...	88,926	2	1	-	1	-	-	-	-	-	-
Lawrence, ...	85,892	4	1	1	-	-	-	-	-	-	2
Somerville, ...	77,236	6	3	-	-	-	2	1	-	-	-
Holyoke, ...	57,730	4	2	1	-	-	-	1	-	-	-
Brockton, ...	56,878	4	2	-	-	-	-	-	-	2	-
Malden, ...	44,404	2	1	-	-	1	-	-	-	-	-
Haverhill, ...	44,115	3	2	-	-	-	-	-	-	1	-
Salem, ...	43,697	-	-	-	-	-	-	-	-	-	-
Newton, ...	39,806	-	-	-	-	-	-	-	-	-	-
Fitchburg, ...	37,826	-	-	-	-	-	-	-	-	-	-
Taunton, ...	34,259	1	1	-	-	-	-	-	-	-	-
Everett, ...	33,484	1	1	-	-	-	-	-	-	-	-
Quincy, ...	32,642	-	-	-	-	-	-	-	-	-	-
Chelsea, ...	32,452	-	-	-	-	-	-	-	-	-	-
Pittsfield, ...	32,121	1	1	-	-	-	-	-	-	-	-
Waltham, ...	27,834	-	-	-	-	-	-	-	-	-	-
Brookline, ...	27,792	1	1	-	-	-	-	-	-	-	-
Chicopee, ...	25,401	1	1	-	-	-	-	-	-	-	-
Gloucester, ...	24,398	-	-	-	-	-	-	-	-	-	-
Medford, ...	23,150	-	-	-	-	-	-	-	-	-	-
North Adams, ...	22,019	-	-	-	-	-	-	-	-	-	-
Northampton, ...	19,431	-	-	-	-	-	-	-	-	-	-
Beverly, ...	18,650	-	-	-	-	-	-	-	-	-	-
Revere, ...	18,219	-	-	-	-	-	-	-	-	-	-
Leominster, ...	17,580	-	-	-	-	-	-	-	-	-	-
Attleborough, ...	16,215	1	1	-	-	-	-	-	-	-	-
Westfield, ...	16,044	1	-	-	-	1	-	-	-	-	-
Peabody, ...	15,721	1	1	-	-	-	-	-	-	-	-
Melrose, ...	15,715	1	-	-	1	-	-	-	-	-	-
Woburn, ...	15,308	1	1	-	-	-	-	-	-	-	-
Newburyport, ...	14,949	-	-	-	-	-	-	-	-	-	-
Gardner, ...	14,699	-	-	-	-	-	-	-	-	-	-
Marlborough, ...	14,579	-	-	-	-	-	-	-	-	-	-
Clinton, ...	13,075	2	1	-	-	-	-	1	-	-	-
Milford, ...	13,055	-	-	-	-	-	-	-	-	-	-
Adams, ...	13,026	2	1	-	-	-	-	-	1	-	-
Framingham, ...	12,948	-	-	-	-	-	-	-	-	-	-
Weymouth, ...	12,895	-	-	-	-	-	-	-	-	-	-
Watertown, ...	12,875	-	-	-	-	-	-	-	-	-	-
Southbridge, ...	12,592	-	-	-	-	-	-	-	-	-	-
Plymouth, ...	12,141	-	-	-	-	-	-	-	-	-	-
Webster, ...	11,509	2	2	-	-	-	-	-	-	-	-
Methuen, ...	11,448	-	-	-	-	-	-	-	-	-	-
Wakefield, ...	11,404	-	-	-	-	-	-	-	-	-	-
Arlington, ...	11,187	-	-	-	-	-	-	-	-	-	-
Greenfield, ...	10,427	-	-	-	-	-	-	-	-	-	-
Winthrop, ...	10,132	-	-	-	-	-	-	-	-	-	-
Total of reporting towns, . .	2,073,345	110	61	8	7	9	4	7	4	7	3

[1] Nonresidents deducted.

[2] Total deaths.

DEATHS FROM DISEASES DECLARED BY THE STATE BOARD OF HEALTH TO BE DANGEROUS TO THE PUBLIC HEALTH IN TOWNS OF LESS THAN 10,000 POPULATION.

[Under the provisions of chapter 210, Acts of 1913.]

DISEASE.	Place.	WEEK ENDING —			
		Mar. 7.	Mar. 14.	Mar. 21.	Mar. 28.
Tuberculosis, pulmonary (or not classified).	Bridgewater,	3	1	–	–
	Dudley,	–	–	–	1
	Easthampton,	–	–	1	–
	Erving,	1	–	1	–
	Essex,	–	1	–	–
	Hadley,	–	–	–	1
	Milton,	–	–	1	–
	Montague,	1	–	–	–
	No. Attleborough,	–	1	–	–
	North Brookfield,	–	–	–	1
	Spencer,	–	–	–	2
Total,		5	3	3	5
Tuberculous meningitis,	Danvers,	–	–	–	1
	Dedham,	–	–	–	1
	Savoy,	–	–	–	1
	Shrewsbury,	–	–	–	1
Total,		–	–	–	4
Tuberculosis, other forms.	Bridgewater,	–	–	–	1
	Stoneham,	1	–	–	–
	Upton,	–	–	–	1
Total,		1	–	–	2
Diphtheria,	Danvers,	–	–	–	1
	No. Attleborough,	–	–	1	–
	Tewksbury,	–	–	–	1
Total,		–	–	1	2
Scarlet fever,	Dighton,	1	–	–	–
Measles,	Walpole,	–	–	–	1
Whooping cough,	Acushnet,	–	1	–	–
	Duxbury,	1	–	–	1
	Norwood,	–	1	–	–
	Shrewsbury,	–	–	–	1
Total,		1	2	–	2

REPORT ON INSPECTION OF FOOD AND DRUGS.

Laboratory Examinations of Food and Drugs.

The following tables present the results of the laboratory examinations during the month of March, 1914, of samples of food and drugs collected by inspectors of the Board: —

The cities and towns in which samples were collected were: Arlington, Boston, Brockton, Brookline, Burlington, Canton, Danvers, Dracut, Fall River, Hudson, Lawrence, Lowell, Lynn, Malden, Maynard, Natick, Norton, Pittsfield, Quincy, Salem, Sherborn, Somerville, Springfield, Stoughton, Waltham, West Springfield, Woburn.

Summary of Analyses.

Articles examined.	Number found to be of Good Quality.	Number adulterated or varying from the Legal Standard.	Total.
Butter,	1	–	1
Cocoa,	28	5	33
Cocoa shells,	3	–	3
Condensed milk,	1	1	2
Confectionery,	1	–	1
Cream,	21	–	21
Cream of tartar,	3	–	3
Drugs,	58	14	72
Grape juice,	2	–	2
Ice cream,	2	–	2
Jams and jellies,	6	–	6
Lime juice,	1	–	1
Malt liquor,	5	–	5
Maple sugar,	3	1	4
Maple syrup,	1	–	1
Meat products: —			
Hamburg steak,	1	–	1
Sausages,	20	2	22
Milk,	321	58	379
Olive oil,	1	–	1
Peanut butter,	1	–	1
Salad dressing,	1	–	1
Spices,	7	–	7
Shrimp,	1	4	5
Table sauce,	3	–	3
Totals,	492	85	577

PROSECUTIONS FOR VIOLATIONS OF THE LAW RELATING TO FOOD AND DRUGS.

Five convictions were secured during the month of March, 1914, for selling adulterated food and drugs, as follows: —

No.	NAME OF DEFENDANT.	Place.	Character of Article sold.
1	William Mara, . .	Pittsfield, .	Cider (preserved).[1]
2	John Day, . . .	Woburn, .	Milk (total solids, 10.70).
3	Myron L. Scott, . .	Springfield, .	Milk (total solids, 11.60).
4	Rood & Woodbury Company.	Springfield, .	Mince meat (benzoic acid).
5	Louis W. Hawkes, . .	Saugus, .	Milk (watered).[2]

[1] Appealed.

[2] This sample of milk was taken in Saugus by the milk inspector of the city of Lynn. Complaint, however, was made in the Lynn court by the State food and drug inspector at the request of the local authorities. Fine imposed, $50. Appealed.

Fines imposed, $136.

LIST OF SAMPLES OF FOOD, DRUGS AND MILK COLLECTED DURING THE MONTH OF MARCH, 1914.

Samples of Food in which No Adulteration was detected.

CELERY SALT.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
23851	Crofts & Reed, Chicago, Ill., ...	Crofts & Reed, Chicago, Ill.

COCOA.

23639	Boston Cash Supply Company, Somerville, . .	Walter H. Baker, Dorchester.
23638	Boston Cash Supply Company, Somerville, . .	Point Selter.
23605	J. T. Connor, Boston, ...	Favorite.
23637	C. H. Giles, Somerville, ...	Hershey's.
23636	C. H. Giles, Somerville, ...	C. H. Giles.
23607	E. E. Gray & Co., Boston, ...	Gray's.
23600	Houghton & Dutton, Boston, ...	Apollo.
23599	Houghton & Dutton, Boston, ...	Bensdorp's.
23597	Houghton & Dutton, Boston, ...	Lowney's.
23598	Houghton & Dutton, Boston, ...	Baker's.
7866-R	Independent Beef and Provision Company, Medford.	Wan-Eta.
23643	Liggett Drug Company, Boston, ...	Fenway.
23644	Liggett Drug Company, Boston, ...	Guth.
23610	London Tea Company, Boston, ...	London.
7816-R	Mills Tea and Butter Company, Springfield, .	King Arthur.

Samples of Food in which No Adulteration was detected — Continued.

COCOA — Concluded.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
23604	S. S. Pierce Company, Boston,	Blooker. J. & C. Blooker, Amsterdam, Holland.
23603	S. S. Pierce Company, Boston,	Cocoatina. H. Schweitzer & Co., London, Eng.
23601	S. S. Pierce Company, Boston,	Huyler's.
23517	Scott Tea Company, Chelsea.	
23649	H. Siegel & Co., Boston,	Elbart.
23650	H. Siegel & Co., Boston,	Tri State.
23640	F. Simon & Co., Somerville,	Mardi Gras.
23314	Smith & Murray, Springfield.	
7824-R	Springfield Creamery, Springfield,	Ox-heart.
23647	W. Witherill & Co., Boston,	Peters.
23648	W. Witherill & Co., Boston,	Brewster.
7468-R	34 Mills Street, Salem,	Puritan.

COCOA SHELLS.

23632	Ginter Grocery Company, Boston,	Bensdorp's.
23634	S. S. Pierce Company, Boston,	Walter H. Baker, Dorchester.
23635	S. S. Pierce Company, Boston.	

CONDENSED MILK.

23612	Santos Tea and Coffee Company, Boston,	Silver Cow, Borden's Condensed Milk Company, New York.

CONFECTIONERY.

23739	C. D. Swain & Co., Boston,	Marshmallows.

CREAM OF TARTAR.

23843	Crofts & Reed, Chicago, Ill.,	Crofts & Reed, Chicago, Ill.
23783	F. P. Reynolds, Salem,	Williams Carleton Company, Conn.
q 13321	B. M. Wollenberg, Boston.	

FRUIT JUICES.

Lime Juice.

23921	W. & A. Bacon Company, Boston,	"Hill Crest." Goulding Bros., Whitman, Mass.

Grape Juice.

23919	W. & A. Bacon Company, Boston,	Made from Chautauqua Concord Grapes.
23920	W. & A. Bacon Company, Boston,	Angelus. The California Grape Juice Company, California.

Samples of Food in which No Adulteration was detected — Continued.

ICE CREAM.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
6203-S	S. G. Emmanuel Company, Quincy.	
6205-S	S. G. Emmanuel Company, Quincy.	

JAMS AND JELLIES.

23651	Cobb, Aldrich Company, Brockton, . . .	Southwark Fruit Jam. American Preserve Company, Pennsylvania.
23608	E. E. Gray Company, Boston, ...	Raspberry jam.
23630	Robert Seaver & Son, Jamaica Plain, . . .	Raspberry jam.

Cherries.

23695	Yerxa Branch, Watertown, ...	Maraschino. John Magee & Co., New York.

MALT LIQUORS.

23742	J. F. Connor & Co., Boston, ...	Roessle Premium Lager. The Roessle Brewery, Boston.
23742	C. S. Johnson, Boston, ...	Schlitz Milwaukee Beer. Jos. Gahn & Son, Boston.
23743	C. S. Johnson, Boston, ...	PabstMilwaukee. Pabst Company, Milwaukee.
23741	R. Seaver & Son, Boston, ...	Burkhardt's. Burkhardt Brewing Company, Boston.
23740	C. D. Swain & Co., Boston, ...	Salzburger Bock Beer. McCormick Brewery Company, Boston.

MAPLE SUGAR.

6291-S	A. Cunir & Co., Lawrence, ...	Vermont Farmers Company, Springfield.
q 13190	Epstein Drug Company, Boston.	
23918	Walker-Rintels Drug Store, Boston.	
23777	Liggett's Drug Company, Boston, . . .	New England Maple Syrup Company, Cambridge.

MAPLE SYRUP.

23689	Adams Bros., Needham, ...	Vermont Maple Sugar Maker's Market, Randolph, Vt.
6209-S	L. J. Sturtevant, Boston, ...	Cold Brook Sugar Camp, West Dover, Vt.

MEAT PRODUCTS.

Frankfort Sausage.

q 13373	Fred R. Bopp, Chelsea, ...	F. W. Baldan & Co., Boston.
6445-S	Cudahy Packing Company, Boston.	
6315-S	Fairburn's Market, Lowell.	
q 13231	C. W. Hegeman, Mittineague, ...	Hardy & Co., Springfield.
q 13333	Humphrey's Market, Boston.	

Samples of Food in which No Adulteration was detected — Continued.

MEAT PRODUCTS — Concluded.

Frankfort Sausage — Concluded.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
q 13370	Ideal Market, Revere,	J. P. Squire & Co., Boston.
q 13375	Ideal Market, Chelsea,	F. W. Baldan & Co., Boston.
q 13249	Mohican Company, Salem,	Zimmerman & Co., Boston.
23802	Shaws Public Market, Brockton.	
23735	Springfield Public Market, Springfield.	
6311-S	Union Market, Lowell.	
q 13372	Webster Avenue Market, Chelsea,	F. W. Baldan & Co., Boston.
q 13371	West's Market, Chelsea,	A. Lord & Co., Chelsea.
23964	Whitehead Market, Fall River.	

Hamburg Steak.

q 13235	Rood & Woodbury, Springfield.	

Pork Sausage.

q 13374	Fred R. Bopp, Chelsea,	Eastern Packing Company, Boston.
6447-S	Cudahy Packing Company, Boston.	
q 13248	Mohican Company, Salem,	Zimmerman & Co., Boston.
23804	Mohican Company, Brockton.	
6309-S	Pigeon's Market, Lowell.	
q 13233	Rood & Woodbury, Springfield.	
23801	Shaws Public Market, Brockton.	
23734	Springfield Public Market, Springfield.	
23965	Whitehead Market, Fall River.	

Sausage.

6449-S	Cudahy Packing Company, Boston.	
6451-S	Cudahy Packing Company, Boston.	
6301-S	E. E. Gray Company, Boston.	
6303-S	E. E. Gray Company, Boston.	
23805	Mohican Company, Brockton.	
23966	Whitehead Market, Fall River.	

OLIVE OIL.

23849	Crofts & Reed, Chicago, Ill.,	Crofts & Reed, Chicago, Ill.
23696	D. Mazzone, Newton Upper Falls,	La Patria. La Patria Olive Oil Company, Italy.

PEANUT BUTTER.

23846	Crofts & Reed, Chicago, Ill.,	Crofts & Reed, Chicago, Ill.

SALAD DRESSING.

23845	Crofts & Reed, Chicago, Ill.,	Crofts & Reed, Chicago, Ill.

Samples of Food in which No Adulteration was detected — Concluded.

SHRIMP.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
6249–S	Prior & Townsend, Boston.	

SPICES.

Cinnamon.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
23850	Crofts & Reed, Chicago, Ill., ...	Crofts & Reed, Chicago, Ill.

Ginger.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
23842	Crofts & Reed, Chicago, Ill., ...	Crofts & Reed, Chicago, Ill.

Mustard.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
23844	Crofts & Reed, Chicago, Ill., ...	Crofts & Reed, Chicago, Ill.
23852	Crofts & Reed, Chicago, Ill., ...	Crofts & Reed, Chicago, Ill.

Nutmeg.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
23841	Crofts & Reed, Chicago, Ill., ...	Crofts & Reed, Chicago, Ill.

Black Pepper.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
23839	Crofts & Reed, Chicago, Ill., ...	Crofts & Reed, Chicago, Ill.

White Pepper.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
23840	Crofts & Reed, Chicago, Ill., ...	Crofts & Reed, Chicago, Ill.

TABLE SAUCES.

Beet Ketchup.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
6385–S	E. E. Gray Company, Boston, ...	L. M. Blanchard's Famous Beet Ketchup.

Chili Sauce.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
23609	E. E. Gray Co., Boston, ...	Golden Gate.
23641	C. H. Giles Company, Somerville, . . .	Brunswick. Eldridge, Baker Company, Boston.

Samples of Food which upon Examination were found to be labeled in Accordance with Law.

MEAT PRODUCTS.

Frankfort Sausage.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
6453–S	A. J. Cunningham Company, Boston.	
6439–S	Park's Sausage and Provision Company, Boston.	

Pork Sausage.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
6437–S	Park's Sausage and Provision Company, Boston.	

Sausage.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
6443–S	Park's Sausage and Provision Company, Boston.	

Samples of Food which upon Examination were found to be adulterated.

BROMA[1] (CONTAINING SUGAR AND ARROWROOT).

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
23546	C. D. Swain & Co., Boston, ...	Broma. Walter H. Baker Company Dorchester.

COCOA[2] (CONTAINING SUGAR AND ARROWROOT).

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
23633	S. S. Pierce Company, Boston, ...	Epp's.

COCOA[2] (CONTAINING SUGAR).

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
23606	E. E. Gray Company, Boston, ...	Hasty Lunch.
23596	Houghton & Dutton, Boston, ...	Phillips. Chas. H. Phillips Chemical Company, New York.
25645	C. D. Swain & Co., Roxbury, ...	Whitman.

MAPLE SUGAR (ADULTERATED WITH CANE SUGAR).

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
q 13221	Zevitas Bros., Boston.	

MEAT PRODUCTS (CONTAINING CEREAL).

Frankfort Sausage.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
q 13234	Rood & Woodbury, Springfield.	

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[1] Defined by the Standard Dictionary as *the dry powder of cacao-seed after a thorough expression of the oil.*

[2] Percentages of ingredients not stated.

Samples of Food which upon Examination were found to be adulterated — Concluded.

Pork Sausage.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
6435–S	Park's Sausage and Provision Company, Boston.	

Sausage.

6441–S	Park's Sausage and Provision Company, Boston.[1]	

Sausage (containing Color).

6427–S	James Smith, Lowell, ...	English Sausage.

Sausage (containing over 2 Per Cent. Cereal).

6429–S	James Smith, Lowell.	

Samples of Drugs in which No Adulteration was detected.

ALCOHOL.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
23652	George F. Hewett, Charlestown.	
q 13174	W. A. Phillips, Rockland.	
q 13232	Daniel Spaight, Springfield.	

BLUE OINTMENT.

6207–S	Walsh Drug Store, Quincy, ...	H. K. Mulford, Philadelphia, Pa.

BORAX.

23584	Mohican Company, Springfield, ...	Mohican Company, Springfield.

QUININE PILLS.

23778	Raymond Syndicate, Boston.	

SPIRIT OF ANISE.

q 13253	C. S. Cogley, Salem.	
q 13327	C. H. Dexter, Boston.	
q 13251	James F. Fitzgerald, Salem.	
	Green, The Druggist, Boston.	
q 13331	Wm. H. Knight, Boston.	
q 13342	A. P. Pilon, Somerville.	

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[1] Contained added starch.

Samples of Drugs in which No Adulteration was detected — Concluded.

SPIRIT OF NITROUS ETHER.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
q 13214	T. A. Bishop, Dorchester.	
6431-S	P. Noe Brunelle, Lowell.	
q 13328	C. H. Dexter, Boston.	
23775	Fiedler Bros. Company, Lawrence, Mass.	
q 13211	Field's Corner Pharmacy, Boston.	
q 13250	Upton & Frisbee, Salem.	
6211-S	Green, The Druggist, Boston.	
q 13182	C. R. Hillburg & Co., Brockton.	
q 13187	C. R. Hillburg & Co., Brockton.	
q 13220	Jaynes Drug Company, Lynn.	
q 13332	Wm. H. Knight, Boston.	
q 13254	Liggett's & Co., Lynn (Hall & Lyon).	
q 13219	J. M. Nelson, Lynn.	

SPIRIT OF PEPPERMINT.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
q 13213	T. S. Bishop, Dorchester.	
q 13216	Brody's Pharmacy, Dorchester.	
q 13256	Depot Pharmacy, Salem.	
q 13319	Hubbell & McGowan Company, Boston.	
q 13191	Jaynes Drug Company, Boston.	
23774	F. L. C. McGowan, Easthampton.	
q 13173	William A. Phillips, Rockland.	
23773	Charles V. Ryan, Springfield.	
q 13210	Mrs. M. A. Whitemarsh, Dorchester.	

SULPHUR.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
23838	Crofts & Reed Co., Chicago, Ill., ...	Crofts & Reed, Chicago, Ill.

TINCTURE OF IODINE.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
q 13175	W. N. Baker, Boston.	
23916	Brookline Pharmacy, Boston.	
q 13326	Choate Drug Company, Boston.	
q 13252	Chas. S. Cogley, Salem.	
23911	F. S. Colley, Boston.	
q 13218	Davis & Young, Lynn.	
q 13329	C. H. Dexter, Boston.	
23909	European Pharmacy, Boston.	
q 13212	Field's Corner Pharmacy, Dorchester.	
q 13318	Gardner & Co., Boston.	
23915	L. W. Griffin, Boston.	
23910	Grindle & Goupert, Boston.	
	Green, The Druggist, Boston.	
q 13255	J. R. Goddu, Salem.	
q 13320	Hubbell & McGowan, Boston.	
q 13217	Ropes Drug Company, Lynn.	
23914	A. D. Ross, Boston.	
23772	Charles V. Ryan, Springfield.	
23912	Winslow Drug Company, Boston.	

WITCH HAZEL.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
23776	Variety Store, Common Street, Lawrence, . .	Chas. Crompton & Sons, Lynn.

ZINC OINTMENT.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
6307-S	Hollis Drug Company, 23 Union Street, Boston, .	Hollis Drug Company.

Samples of Drugs which upon Examination were found to be labeled in Accordance with Law.

DENATURED ALCOHOL.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
6247-S	Whitney & Snow, Somerville.	

Samples of Drugs which upon Examination were found to be adulterated.

SPIRIT OF ANISE.

Number of Sample.	DEALER.	Wholesaler or Manufacturer.	Per Cent. of required Strength.
q 13325	Choate Drug Company, Boston, ...	– –	58
23941	Richard F. Smith, Fall River, ...	– –	56

SPIRIT OF NITROUS ETHER.

q 13215	Brody's Pharmacy, Dorchester, ...	– –	78
q 13324	Choate Drug Company, Boston, ...	– –	68
23939	Mary Davis, Fall River, ...	– –	56
q 13230	Clarence C. Smith, Mittineague, ...	– –	61
23784	F. P. Reynolds, Lynn, ...	Williams-Carlton Company, Connecticut.	81

SPIRIT OF PEPPERMINT.

q 13177	R. E. Bellows Company, Boston, ...	– –	46
q 13316	Gardner & Co., Boston, ...	– –	80
23940	Richard F. Smith, Fall River, ...	– –	32

TINCTURE OF IODINE.

23913	Berkley Drug Company, Boston, ...	– –	80
q 13330	Wm. H. Knight, Boston, ...	– –	74
q 13247	S. J. Siegel, Boston, ...	– –	84
q 13229	Clarence C. Smith, Mittineague, . . .	– –	58

Samples of Milk which upon Examination were found to be adulterated.

Number of Sample.	Name of Dealer, Wholesaler or Producer.	Results of Analyses.
23901	S. Evans, Malden,	Total solids, 10.60 per cent.; fat, 1.80 per cent.; skimmed milk.
23708	M. Feeley, Stoughton,	Total solids, 12.90 per cent.; fat, 4.70 per cent.; contained added water.
23928	H. C. Hambly, Fall River,	Total solids, 10.74 per cent.; fat, 2.40 per cent.; proteins, 2.84 per cent.; skimmed milk.
q 13353	Stanislo Kownlski, Salem,	Total solids, 11.50 per cent.; fat, 3.80 per cent.; contained added water.
6221-S	William S. Noble, Pittsfield,	Total solids, 9.84 per cent.; fat, 0.60 per cent.; skimmed milk.
23794	J. Z. Packard, Brockton,	Total solids, 11.60 per cent.; fat, 2.70 per cent.; proteins, 3.15 per cent.; skimmed milk.
23958	Peckham Dairy Milk Company, Fall River.	Total solids, 10 per cent.; fat, 2.75 per cent.; contained added water.
23959	Peckham Dairy Milk Company, Fall River.	Total solids, 10.48 per cent.; fat, 2 per cent.; proteins, 2.44 per cent.; skimmed milk.
6229-S	Chas. E. Seymour, Pittsfield,	Total solids, 9.76 per cent.; fat, 0.30 per cent.; skimmed milk.
q 13344	G. E. Towne, Salem,	Total solids, 10.44 per cent.; fat, 1.50 per cent.; proteins, 3.13 per cent.; skimmed milk.

COLD STORAGE.

ARTICLES IN COLD STORAGE CONDEMNED UPON PHYSICAL AND CHEMICAL EXAMINATIONS AS UNFIT FOR FOOD.

Date.	Articles.	Weight (Pounds).	Reasons.	Disposition.
Mar. 16, 1914	Shad,	60	Decomposed,	Buried
Mar. 16, 1914	Sweetbreads,	5	Dried and soiled,	Incinerated
Mar. 16, 1914	Goose,	10	Dried and soiled,	Incinerated
Mar. 16, 1914	Mutton fores,	14	Dried and soiled,	Incinerated
Mar. 16, 1914	Beef,	7	Dried and soiled,	Incinerated
Mar. 16, 1914	Fowl,	11	Dried and soiled,	Incinerated
Mar. 16, 1914	Chickens,	7	Dried and soiled,	Incinerated
Mar. 16, 1914	Pig,	15	Dried and soiled,	Incinerated
Mar. 18, 1914	Pork trimmings,	1,624	Decomposed,	Rendered
Mar. 21, 1914	Beef trimmings,	575	Decomposed,	Rendered
Mar. 24, 1914	Chickens,	107	Decomposed,	Rendered
Mar. 24, 1914	Chickens,	87	Dried,	Rendered
Mar. 28, 1914	Livers,	80	Soiled,	Rendered
Mar. 28, 1914	Eggs, canned,	24	Decomposed,	Rendered
Mar. 28, 1914	Chickens,	385	Decomposed,	Rendered
Mar. 28, 1914	Mutton racks,	32	Dried and soiled,	Incinerated
Mar. 28, 1914	Pork shoulders,	45	Decomposed,	Incinerated
Mar. 28, 1914	Pigeons,	6	Tainted,	Incinerated
Mar. 28, 1914	Broiler, fowl, shoulder, loin,	21	Dried, soiled, rancid,	Incinerated
Mar. 30, 1914	Beef livers,	2,401	Decomposed,	Rendered
Mar. 30, 1914	Geese,	245	Decomposed,	Rendered
Mar. 30, 1914	Beef,	52	Tainted,	Rendered
Mar. 31, 1914	Turkeys and fowl,	1,417	Decomposed,	Rendered
Total,		7,230		

CHEMICAL EXAMINATIONS OF SAMPLES OF COLD-STORAGE GOODS.

ARTICLES.	Number found to be of Good Quality.	Number found to be Unfit for Food.	Total Number of Samples examined.
Eggs,	4	–	4
Egg whites,	1	–	1
Turkeys,	1	11	12
Veal,	1	–	1
Totals,	7	11	18

During the month of March, 1914, the following convictions were secured on account of the absence of a sign marked "Cold Storage Goods Sold Here"; also, representing cold-storage goods as fresh: —

No.	Date.	NAME OF DEFENDANT.	Place.	Result.
1	Mar. 9, 1914	John T. Connor Company,	Chelsea,	Fined.[1]
2	Mar. 10, 1914	Israel Kosofsky,	Everett,	Case filed.
3	Mar. 10, 1914	Oscar Herman,	Everett,	Case filed.
4	Mar. 10, 1914	Charles Kalajian,	Everett,	Case filed.
5	Mar. 10, 1914	John Gostanian,	Everett,	Case filed.
6	Mar. 10, 1914	Morris Vernon,	Everett,	Fined.
7	Mar. 17, 1914	Charles Warner,	Roxbury,	Fined.
8	Mar. 18, 1914	Joseph Andrews,	Roxbury,	Case filed.

[1] Appealed.

Total amount of fines imposed, $35.

REPORT ON THE PROSECUTIONS CONCERNING SALE OF EGGS TAKEN FROM COLD STORAGE.

CHAPTER 538, ACTS OF 1913.

The following convictions were secured in March, 1914, because eggs "offered or exposed for sale" were not properly marked in accordance with the rules and regulations made by the State Board of Health: —

No.	Date.	NAME OF DEFENDANT.	Place.	Result.
1	Mar. 10, 1914	Israel Kosofsky,	Everett,	Fined.
2	Mar. 13, 1914	Abraham Jacobs,	Revere,	Case filed.

Total fine imposed, $10.

REPORT ON INSPECTION OF DAIRIES.

During the month of March, 1914, 192 dairies were examined in the following places: —

Place.	Number examined.	Class AA.	Class A.	Class B.	Unclean Dairies.	Per Cent. Clean Dairies.
Brewster,	2	–	–	2	–	100.00
Buckland,	6	–	1	5	–	100.00
Cambridge,	3	–	–	3	–	100.00
Charlemont,	2	–	–	2	–	100.00
Chatham,	6	–	–	3	3	50.00
Clinton,	1	–	–	1	–	100.00
Cohasset,	3	1	–	2	–	100.00
Duxbury,	3	–	1	1	1	66.67
Eastham,	3	–	–	2	1	66.67
Hamilton,	6	1	1	3	1	83.33
Harwich,	5	–	–	1	4	20.00
Hingham,	16	–	6	10	–	100.00
Manchester,	5	–	–	5	–	100.00
Newbury,	1	–	–	1	–	100.00
Norwood,	17	–	1	8	8	52.94
Orleans,	3	1	–	1	1	66.67
Plymouth,	18	1	1	7	9	50.00
Provincetown,	5	–	–	2	3	40.00
Scituate,	7	1	2	3	1	85.71
Shelburne,	3	–	–	2	1	66.67
Swampscott,	3	–	–	–	3	–
Truro,	9	–	–	4	5	44.44
Walpole,	31	–	2	11	18	41.94
Wellfleet,	4	–	–	2	2	50.00
Wenham,	12	–	2	10	–	100.00
Westwood,	18	1	3	11	3	83.33

Total number of dairies examined,	192
Total number of commendable dairies,	128
Total number of unclean dairies,	64
Percentage of dairies which passed inspection,	66.67

In addition to the above, 88 dairies were visited at which the sale of milk had been discontinued, 4 of which are making butter; also, 58 dairies were reported as producing less than 20 quarts of milk a day.

Included in the total number of dairies visited were 32 which had recently started in the milk-producing business and were inspected for the first time.

The names of the owners of the dairies found to be worthy of commendation follow: —

BREWSTER.

Class B.

	Per Cent.
Crocker, W. B.,	60
Wendell, A. B.,	67½

BUCKLAND.

Class A.

	Per Cent.
Wilder, E. G.,	76½

Class B.

	Per Cent.		Per Cent.
Bray, A. C.,	65½	Trow, Charles W.,	68½
Cardwell, John,	62	Warfield, F. L.,	60
Murphy, John J.,	62		

CAMBRIDGE.

Class B.

Hickey, Timothy,	63	Printon, Robert (Estate),	67
Jennings, C. T.,	69½		

CHARLEMONT.

Class B.

Dubuque, Benjamin,	68½	Streeter, A. E.,	65¼

CHATHAM.

Class B.

Doane, Leonard M.,	64½	Snow, Charles,	61
Ryder, Albert G.,	65½		

CLINTON.

Class B.

Rauscher, John,	67

COHASSET.

Class AA.

Barron, C. W.,	100

Class B.

Donahue, Michael,	72½	Wheelwright, Frank W.,	71½

DUXBURY.

Class A.

Bay Farm Company,	88

Class B.

	Per Cent.
Parker, J. K.,	71

EASTHAM.

Class B.

	Per Cent.		Per Cent.
Doane, Abaelino,	67	Knowles, W. F.,	62½

HAMILTON.

Class AA.

Norman, Maxwell,	95

Class A.

Fitz, George W.,	82½

Class B.

Knowlton, Isaac F.,	69½	Whipple, Charles E.,	69½
Lamson, Jonathan,	67		

HARWICH.

Class B.

Kelly, John,	61½

HINGHAM.

Class A.

Brewer, J. R. (Estate),	79	Fearing, Watson B.,	88
Codman, William C.,	88	Fee, Peter F.,	76
Damstra, Ynte,	75	Schirmer Brothers,	82

Class B.

Cushing, Harold M.,	68	Schultz, Ernest C.,	70
Damstra, Sytze,	73	Sherman, Joseph H.,	62
Fottler, Joseph A.,	63	Threlfall, Joseph E.,	62
Havey, Stephen,	69	"Town Farm,"	65
Nelson, George W.,	66½	Young, C. M.,	60

MANCHESTER.

Class B.

Baker, R. & L.,	71	Silva, Joseph,	61½
Cheever, (Mrs.) Mary A.,	60	"Town Farm,"	64
Lucas, Albert J.,	68		

Newbury.

Class B.

	Per Cent.
Pritchard, Harold W.,	72½

Norwood.

Class A.

Fisher, Fred L.,	82½

Class B.

	Per Cent.		Per Cent.
Dean, Eben W.,	60	Hoar, Clarence D.,	72½
Endicott, E.,	68½	Mahoney, Thomas U.,	73½
Fales, Albert,	62½	Nickerson, William,	61½
Fales, Frank,	64	Talbot, Edward E.,	68

Orleans.

Class AA.

Pope, (Dr.) Lemuel, Jr.,	90½

Class B.

Cole, Everett A.,	61½

Plymouth.

Class AA.

Stone, C. A.,	94

Class A.

Whipple, Sherman,	81½

Class B.

Beckford, Joshua,	62½	Madora, Manuel,	60
Blanchard, George H.,	64	Moulton, Eben,	60½
Churchill, Josiah D.,	65	Whiting, Frank,	61½
Finney, William H.,	70		

Provincetown.

Class B.

Snow, T. A.,	67	Steele, Joseph,	66½

SCITUATE.

Class AA.

	Per Cent.
Lawson, Thomas W.,	97

Class A.

	Per Cent.
Finnie, Charles G.,	76½
Wagner, Charles M.,	75½

Class B.

Andrews, Charles F.,	61½
Connolly, Michael,	64
Waterman, W. W.,	61

SHELBURNE.

Class B.

Paine, Frank,	61½
Purrington, Gordon T.,	68½

TRURO.

Class B.

Cabrall, Joseph,	60½
Francis, A. A..	65½
Rose, Anthony F.,	66
Small, Frank S.,	67½

WALPOLE.

Class A.

Plimpton, George (1),	84
Plimpton, George (2),	81

Class B.

Banks, Dr.,	60
Bock Brothers,	67
Bradford, C. G.,	70
Cutler, Charles F.,	67
Everett, Edwin,	60½
Hartshorn Brothers,	60½
Mingels, Edward,	71
Scherer, David,	63½
Sexton, John,	67½
Wheeler, William J. W.,	61½
Yonker, K. A.,	63

WELLFLEET.

Class B.

Rose, Manuel,	62
Ryder, Ellsworth S.,	62½

WENHAM.

Class A.

Daniels, A. L.,	79
Johnson, W. H.,	89½

Class B.

	Per Cent.		Per Cent.
Barnes, Thomas M.,	70½	Pingree, (Mrs.) H. E.,	67¾
Bixby, C. W.,	63	Prince, S. R., Company,	65
Brown, J. S.,	60	Putnam, W. S.,	60
Dodge, William P.,	63½	Stanley, F. A.,	64½
Perkins, George,	63½	Tarr, (Mrs.) F. H.,	60½

WESTWOOD.

Class AA.

	Per Cent.
Crane, Joshua, Jr.,	90

Class A.

Codman, E. D.,	84	Rice, George T.,	84½
McLeod, E.,	80½		

Class B.

Chamberlain, H. H.,	69½	Rice, A. W.,	68½
Colburn, W. P.,	68	Sheehan Brothers,	69
Conrick, (Mrs.) Mary J.,	60	Sheehan, (Mrs.) Hannah,	60
Draper, F. E.,	66½	Smith, Elmer E.,	61
Eaton, L. A. (Estate),	62½	Wetherbee, Henry E.,	62½
Healey, Francis,	64½		

CLASSIFICATION OF DAIRIES.

AA = 90 to 100 per cent.
A = 75 to 90 per cent.
B = 60 to 75 per cent.
Below Class B (60 per cent.), unclean or dirty.

DIRTY HANDS AND TYPHOID FEVER.[1]

MARK W. RICHARDSON, M.D., SECRETARY OF THE MASSACHUSETTS STATE BOARD OF HEALTH.

In the *Journal of the Royal Army Medical Corps* for June and July (1913) appears a most important article on the Causation and Prevention of Enteric Fever in Military Service, by Maj. S. L. Cummins, and the conclusion reached in this article, though written from a military standpoint, can, in most instances, be utilized equally well under the circumstances attending typhoid or enteric fever as it appears in civil life. I have selected a single phase of the subject as presented by

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[1] Read before the Massachusetts Association of Boards of Health, December 11, 1913. Reprinted from American Journal of Public Health, February, 1914, 140.

Major Cummins, and that is the possible rôle of unclean hands in the spread of this disease. Major Cummins in his work made the following interesting series of experiments: —

> The following technique was employed in all the experiments: —
>
> The fingers were washed in a small quantity of sterile water in a sterile "Petri" dish, or watch glass; the resulting dirty water was added, as a rule, to bile salt peptone water or else centrifugalized, and the deposit plated. The fingers, too, were passed over the surface of bile salt plates while still moist after washing. The media were then incubated and examined for *B. typhosus.*
>
> *Experiment I.* (*July 26, 1909*). — Fingers of fecal carrier S. examined. Result: Negative.
>
> *Experiment II.* (*November 2, 1909*). — Fingers of urinary carriers F. I. and S. examined (one hour after passing urine). Result: Carrier F. I., *many colonies of B. typhosus* both on "direct" plates and from the bile salt peptone water. Carrier S., negative.
>
> *Experiment III.* (*November 6, 1909*). — Two urinary and three fecal carriers were paraded without previous warning, and with no reference to the time since excreta had been voided. The fingers of all were examined as above. All were negative as regards *B. typhosus.* From fecal carrier L., however, a fair number of motile Gram-negative bacilli were isolated, giving the cultural reactions of *B. fœcalis alkaligenes.* They were, however, agglutinated completely by a 1 in 100 dilution of antityphoid serum, and partially in dilutions up to 1 in 400. It may be added that the strain of *B. typhosus* from Carrier L. was very resistant to agglutination, only reacting completely up to 1 in 200 of the same antityphoid serum. Unfortunately, the culture kept for further examination was thrown away inadvertently when changing stations, and we were unable to go more completely into the nature of the interesting organism isolated from the fingers of Carrier L.
>
> The series of experiments quoted serves to prove that *B. typhosus* itself, as well as other fecal organisms, can be isolated from the fingers of "carriers," a fact of great importance in connection with the contamination of food supplies. The following experiments show the effects of washing and removing the bacilli from infected fingers: —
>
> *Experiment IV.* (*September 26, 1912*). — To ascertain whether a finger infected with urine is easily sterilized. Dipped the tip of the right index finger in the urine of typhoid carrier A. (Proved to contain upwards of 3,000,000,000 per c.c.) (*a*) Rinsed in lysol solution (approximately 2 per cent.). (*b*) Then held the finger under the tap, rinsing first in cold, then in very hot water (temperature not recorded). (*c*) Washed very carefully in about 0.5 c.c. of sterile water in a watch glass, and plated the whole of the water used for this purpose. Result: Three hundred and thirteen colonies of *B. typhosus* on the plate. (*d*) After the washing in sterile water mentioned under (*c*), the tip of the finger was thoroughly soaked in absolute alcohol, allowed to dry, and the washing in sterile water repeated. The "washings" were again "plated." Result: Four colonies of *B. typhosus.*

Experiment V. (*October 3, 1912*). — Contaminated the tip of left second finger with urine from Carrier A. (*a*) Allowed the finger to dry; (*b*) washed very thoroughly with soap and water under a running tap. *Dried thoroughly with a cloth.* "Washed" thoroughly with 0.5 c.c. of sterile water in a watch glass and plated the "washings." Result: No *B. typhosus* isolated. (*c*) Finally dipped the finger in lysol solution (2 per cent.), scrubbed, dried with a cloth, "washed" as before and plated the "washings." Result: No *B. typhosus.*

The first experiment shows that it may be very difficult to free a finger from contamination by *B. typhosus.* The second attempt was successful, possibly owing to the fact that the fingers were thoroughly dried with a cloth, the mechanical friction apparently helping to remove the bacteria. Even if this were the case, it only means that the cloth became infected, and the danger of contaminated fingers remains ovbious.

In this connection, I will recall to your attention some experiments made by Mr. Henry N. Jones, bacteriologist of the State Board of Health, who has found *B. coli* on three out of twelve towels taken from a number of toilet rooms accessible to a considerable number of persons. Mr. Jones summarizes his results as follows: "A considerable portion of public roller towels becomes contaminated with human feces. An unknown number of human "carriers" have typhoid bacilli in their feces. How many cases of typhoid fever are contracted through contact with soiled roller towels?"

Now, in 1913 (year ending December 1), 2,363 typhoid fever cases were reported to the State Board of Health of Massachusetts. Inasmuch as it is estimated that 4 per cent. of typhoid fever patients become chronic carriers, it is evident that approximately ninety-five "carriers" were added in 1913 to those previously in existence. Moreover, it is stated that women exceed men as chronic carriers of typhoid infection in a proportion of five to one, a most significant fact when it is considered that women, far more than men, are concerned with the handling of our food supplies. Under the circumstances, the wonder would seem to be that we do not have a much larger amount of typhoid fever. If a single drop of urine can contain 3,000,000,000 typhoid bacilli, what can we think about the waiter's thumb which gets into our soup and the none-too-clean fingers of the farmer who milks the cows?

Now as regards typhoid carriers, there is no doubt, in my mind, that the urinary carrier is far more dangerous than the fecal carrier, for urinary infection is practically always constant, whereas fecal infection oftentimes is very markedly intermittent, and in this connection it is important to point out, as shown by Major Cummins, that the carrier condition may be much aggravated by a number of different factors, for instance, under conditions of rest and quiet, the bacilli in both feces and urine may drop to very moderate numbers. In the process, however, of extreme muscular work, such as is seen in a military campaign, the bacilli increase very markedly in number. Furthermore, it has been noted that treatment of typhoid carriers with specific typhoid vaccine increases temporarily to a great extent the number of bacilli excreted.

Another interesting feature pointed out by Major Cummins is the following, that severe diarrhœa will often bring to light typhoid bacilli in the feces of a carrier when they had been absent previously for long periods of time. Major Cummins explains this increase as caused by the rapid passage through the intestinal tract of the typhoid bacilli from the region of the gall bladder to the rectum. Because of this rapid passage, the typhoid bacilli escape a strong inhibitory action exerted ordinarily by the *B. coli communis.* Indeed, another experiment by Major Cummins shows apparently that *B. coli* has this strong antagonistic action on the typhoid bacillus. It was found, for instance, that the growth of the typhoid bacillus in unsterilized milk ceases in a short time because, apparently, of the presence in the milk of *B. coli,* whereas in sterilized milk the typhoid bacillus increases almost without cessation. This feature, of course, has a very important bearing upon the handling of pasteurized milk.

What can we do to eliminate this danger which we run constantly of typhoid infection through the uncleanly habits of typhoid carriers? As far as fecal carriers are concerned, all efforts at the present time have failed to discover any method of cure. Furthermore, urinary carriers, especially of the subacute and chronic type, are very slightly susceptible to curative treatment. A few will yield to the administration of hexamethylenamine. I believe, however, that this drug used from a preventive standpoint, may be of great importance. I have recommended for a number of years that all cases of typhoid fever be given hexamethylenamine in doses of five to ten grains each, three times a day, throughout the course of the disease, and, with such treatment, I believe that the development of the carrier condition, as far as the urinary tract is concerned, may be prevented. I shall never forget the theatrical effect produced by this drug upon the infected urine, as observed during the acute course of the disease. A urine absolutely clouded with bacilli would become oftentimes perfectly clear within twenty-four hours. This, as I have said, is the favorable time for the exhibition of this drug, when the condition is simply that of bacteriuria and before any marked pathological changes have taken place in the mucous membrane of the urinary tract. By active efforts, then, in the direction thus indicated, I have no doubt that the number of urinary carriers in any community can be very distinctly cut down, and this reduction in the number of carriers can not fail to be of the greatest importance as regards the incidence of the disease.

What shall the health officer do when these chronic carriers have been discovered and when it has been demonstrated that no therapeutic measures remove the dangerous conditions? To be logical, typhoid carriers, be they of the fecal or urinary type, should be kept under the supervision and control of health officers as long as their dangerous properties are known to persist, but a period of quarantine which might necessitate individual restraint for a period covering forty or fifty years, is, of course, not to be thought of. In our pamphlet concerning the control of typhoid fever, the State Board of Health has been accustomed to recommend that no typhoid convalescent be discharged from observation "until two consecutive negative examinations have been made of the stools and urine. If the patient's business brings him in contact with food supplies, four consecutive negative examinations of the stools and urine should be required. In case a person is found to be, in spite of all treatment, a chronic carrier of typhoid bacilli, he should be kept under competent supervision by the local board of health; he should not be allowed to engage in occupations requiring the handling of foodstuffs and, in case he moves to another neighborhood, the local health authorities of that neighborhood should be notified at once."

It has been pointed out that to a certain extent, at least, the requirements just stated can be of comparatively little avail, because fecal carriers, being highly intermittent as regards the excretion of typhoid bacilli, can by no means be regarded as without danger, even in the presence of several negative cultures. It has been proposed, therefore, that such examinations be not required and that *every* typhoid convalescent be strongly impressed with the possible dangers he may inflict on others in his surroundings.

While I should be willing to accede to a certain extent to the arguments advanced above, at least as far as the fecal carriers are concerned, I believe that the examination of urine cannot, under any conditions, be given up. The urinary carrier, representing as he does a maximum of potential infection, and, moreover, infection which is likely to be constant for months or years, must without doubt become subject to a supervision infinitely more exacting than that necessary for a fecal carrier. I would, therefore, still require the examination of stools and urines of the convalescent, recognizing the fact that a negative report from the urine is of the greatest possible value, also recognizing, however, that a negative result from the stools is of practically no value.

Finally, as far as unclean hands are concerned, our course, as regards typhoid infection would seem to resolve itself into the two following propositions: first, that inasmuch as no person can be absolutely certain that he is not a typhoid carrier (for, of course, it is well known that a healthy human being, and especially those attendant upon typhoid patients, may become a temporary typhoid carrier, even though he has not suffered from the disease itself) every one should, as far as possible, wash his hands with scrupulous care after any possible contamination with feces or urine, and, secondly, that no one should think of handling food, either for his own use, or for others, without carefully washing his hands.

THE TUBERCULOSIS PROBLEM FROM THE POINT OF VIEW OF LOCAL BOARDS OF HEALTH.[1]

By Bradford H. Pierce, M.D., of Cambridge.

In these days when the question of tuberculosis is so much before the public, we often read of what this or that organization is doing to eradicate the disease, but we hear very little of the actions of the local authorities except perhaps to learn that they are making no effort or are absolutely to be condemned.

Before bacteria were heard of certain diseases of rapid evolution such as smallpox, scarlet fever and diphtheria were found by experience to appear in epidemics. Experience with such epidemics showed that isolation reduced the number of cases. To prepare for and carry out isolation and thus cut down the spread of contagious disease was the primary reason for establishing local boards of health.

From time to time other matters pertaining to the general health of the municipalities were given into the care of these local boards, very often as the result of some advance in medical knowledge or of public agitation.

During the last few years the people have discovered the great economic loss due to tuberculosis. A constantly increasing demand for the prevention of the spread of this disease has manifested itself, and of course the local boards of health were the logical candidates for the responsibility.

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[1] Reprinted from the Medical Communications of the Massachusetts Medical Society, Vol. XXVI., 1913. Delivered June 10, 1913.

Some of these boards accepted it at once and enacted regulations requiring the reporting of every case. In the places where this requirement existed the enthusiastic physicians complied, while those not so enthusiastic regarded it as an additional burden, even none of the board of health's business, and neglected to report their cases unless frequently prodded.

The agitation continued, and by the amendment of an existing statute (1) the State Board of Health in 1907 designated tuberculosis "a disease dangerous to the public health" and therefore reportable by law. Since that time so much legislation has been offered, part of which has been enacted, that the local board of health has had great difficulty in deciding what its policy should be. It takes time to develop a campaign such as is necessary against tuberculosis and it is distressing to expend much effort and money in one direction one year and find that the next, a great deal, if not all of the previous work has gone for nothing.

Under the law (2) some municipalities established isolation hospitals for tuberculosis, then the state established the Trustees of Hospitals for Consumptives, built three more sanatoria, and said (3) that any person whom the Trustees wanted to send to a state hospital could go and the city or town in which that person had a legal settlement must pay the bill no matter whether or not the place in which he had a settlement could provide a bed for him.

It costs four dollars a week to board a patient in a state hospital because the state shares the expense, whereas it costs from eight to fifteen dollars to board a patient in a local hospital. Is it any wonder that those places without local hospitals failed to establish them and that those places with hospitals already built objected strenuously to paying for patients sent to state hospitals against their wishes while maintaining hospitals of their own with many empty beds? Why should the judgment of local officials be handicapped more in tuberculosis than in any other disease?

We have never objected to a patient's going to any hospital he wished so long as he or his friends paid his board, but we have insisted that if we were to stand the expense we would provide for him in our own hospital. In this we have been backed up by the Trustees in nearly every case, except in the incipient cases, although the Trustees have absloute power to deny us this right if they so desire.

Often we are called on to provide for the tubercular patient who has no legal settlement. No matter what it costs us to care for this person, the State Board of Charity will never reimburse for the full expenditure. Sometimes the State Board of Charity says it will not pay anything if the patient is able to go to Tewksbury. Should the patient refuse to go, as many do, we are compelled to discharge him or isolate him at our own expense. Furthermore the State Board of Charity does not consider itself bound by the laws governing notice and denial of liability, and in cases of doubtful settlement, delays so long before notifying the local board that it is not responsible, that there is legally no time left for the local board to serve notice on a city or town in which the patient may have a legal settlement. Cities and towns must notify the State Board of Charity of liability within five days. The State Board of Charity often takes two or three years to notify cities and towns.

The legal side of the problem is but one of the difficulties. Much more trying at times are our relations with physicians and with laymen interested in the subject.

So far as physicians are concerned we are improving. They seem, in Cambridge at least, to be less and less dependent on a positive sputum for diagnosis and more anxious to get their cases reported before the death certificates come in. Progress in this direction is slow, largely because even the best of physicians hesitate to make a definite stand without actually finding tubercle bacilli when it means so much to the patient. I believe that the men who wilfully conceal cases are few and far between, though many who fail to report, offer the excuse that someone else has been treating the case and supposedly had reported it. It is a good idea to insist that every physician report every case as soon as he makes a diagnosis no matter what the previous history has been. More than one physician has informed me that he desired assistance on some case but dreaded to report it for fear the social workers or other misguided enthusiasts would get in on it and set everybody by the ears.

This brings us to a most perplexing phase of the situation, namely the relations between the interested laymen and the local boards of health.

Boards of health are official bodies upon whom are conferred certain legal powers oftentimes very indefinite, because the statutes conferring the powers are in several instances of origin back as far as 1792 and many times modified. It is interesting to read (4) that if a disease dangerous to the public health "exists in a town, the selectmen and board of health shall use all possible care to prevent the spread of the infection, and shall give public notice of infected places to travellers by displaying red flags at proper distances and by all other means which in their judgment may be most effectual for the common safety." This seems to make it mandatory that a red flag be placed on every house in which there is a case of tuberculosis.

By interested laymen I mean philanthropic individuals, members of societies organized to prevent the spread of tuberculosis, and social workers. They are all earnest, enthusiastic, and well meaning. It is doubtful if any two of them have the same amount of common sense or the same degree of knowledge of the disease. A few with whom I have come in contact are well posted, see our difficulties, sympathize with us and give us valuable assistance. The majority know as little about the tubercle bacillus and its lesions as we do about the organism of smallpox. They are just as apt to cross the street when they see a tuberculous person approaching as they are to go round the block rather than pass by the diphtheria hospital. There are people who say to the local board of health, "You should do this," or "You should do that"; furthermore they do not hesitate to tell patients that the board of health is obliged to take care of them and if it does not do so it is neglecting its duty. They resent it if the board of health makes different plans from theirs for a particular patient, with the result that many patients become confused and disheartened. They advertise in large letters and red ink that "Tuberculosis Can Be Cured" but in much smaller type add the all-important statement "if taken in time." They clamor to have this or that pet scheme tried which they are sure will clear up the whole situation.

This is all very well in the place where little or nothing is being done, but where the local board of health is doing all it can, I feel most strongly that these individuals should coöperate with the board of health and not that the board of health should coöperate with them.

Another difference in point of view between the layman enthusiast and the board of health is manifest when we consider that their sole object of attack is tuberculosis, while we are fighting not only tuberculosis but scarlet fever, diphtheria and other much more rapidly spreading diseases. It may and does happen that the entire effort of the board of health must be concentrated on an epidemic of scarlet fever. Delay in scarlet fever would be disastrous but tuberculosis correspondence can wait.

A month or two ago I was informed that a lecturer was using a picture of a large apartment block in Cambridge to illustrate unsanitary living conditions and describing this particular building as a "hot bed for tuberculosis." I have heard residents of the city call it by the same name. Not aware that it was such a dangerous place, I made some inquiry.

The block faces on four streets and contains about ninety apartments some of which open only onto a shaft. Of those apartments opening onto a shaft only one is occupied and that by a single man who is not there much of the time. The others are used for storage. There are seventy-one families in the building at present, mostly of Polish or other foreign birth. The sanitary condition of the premises is certainly no worse than that of many others in the city and the owners are quite willing to keep them in as good condition as they can. During the nine and one-half years since January, 1904, when tuberculosis became reportable, we have had but six cases reported from this block. Considering the locality, the class of people, their occupations, mode of life, and itinerant propensity, this is a very low ratio, lower indeed than that of other houses near by. To call this block a "hot bed for tuberculosis" is an extravagant statement, hurtful to the property, the owners, the board of health, and, to common sense people, hurtful to the cause.

Of all the non-medical workers with whom boards of health touch elbows the most frequent contact is with the social workers. Folks (5) has dealt with this subject in a very common sense way. Among other bits of good advice he remarks that points of contact between health officers and social workers should not be points of conflict. Not as yet have we attained to this in the tuberculosis problem. The fault is not entirely with the social workers but until they individually and officially "uphold, strengthen and dignify" health administrations the blame must rest largely on their shoulders.

The social workers with whom I have had dealings are inclined to regard boards of health as a means to their ends, or if, as they say, through shirking, ignorance, laxity or what not, failing to give them the assistance they demand, as bodies to be circumvented and left out of consideration altogether. They do not hesitate to criticise health officers and institutions, to drag patients from their physicians, or to tell us what we ought to do, yet I would give them all credit for being interested, enthusiastic and conscientious.

Over and over again we learn of a case that is being treated somewhere, never reported to us, unknown to the family physician, but which has been discussed with some worker in our town. Those who are dealing with it say, "Why I supposed some one else had reported it." Often we have to ask the Trustees who it was that made out the application for a case that has been living in the city right along. I have several letters written concerning several patients in which one social worker insists that if the board of health will not consent to her plan then the board must take the responsibility. She might have added that the board of health had never asked her to assume any responsibility and we could have said that if she had not meddled with the cases they would have all been taken care of properly with far less discomfort. I have another letter from another worker in which she tells a patient's mother that she does not think our hospital "is at all a fit place." She goes on to say, "I realize that it is very hard for you to know who to believe when different societies tell you different things." The family was one that could afford to pay its physician yet she tried to get them all to the hospital she represented. Still another social worker with a very sick patient to provide for from several miles out of town begged us to take him in. We did so on her assurance that she could and would get the town in which he had a settlement to assume financial responsibility. The patient off her hands, her connection with the case apparently ceased. These same women go to public hearings and denounce physicians and boards of health.

Settlement law is a stumbling block for all of us. Nothing could be more confusing. A person interested in a particular case will argue with exasperating persistence that because the patient lived in a certain city for twenty years or more his legal settlement must be in that place, whereas he may never have paid any taxes and have gained a settlement elsewhere through his father or mother. Such arguments lead to distrust and ill feeling.

The problem of the vicious, incorrigible consumptive is one which probably no municipality of any size has escaped. I have heard and read many discussions of the subject, mostly by those who have never been obliged to face it. None have discussed it so sensibly as Callahan (6) at the recent conference at Holyoke. No matter how clear it may appear on paper it is not so simple as it seems. To cite a case may not be amiss.

A. B. was admitted to our hospital where he remained about a month creating more or less disturbance. He left to go on a drunk. After about another month, much talk by interested citizens and a good lecture he was readmitted. This time he stayed a little over three months greatly to the disgust of many inmates who were self respecting. His conduct was such that he could not remain. We next boarded him with a person experienced in the care of consumptives. Here, too, he acted so badly that the woman would not keep him. I told Dr. Hawes all about it and he consented to giving the man a trial at a State sanatorium. While waiting to enter, we even provided him with money, very unwisely, until, through the efforts of others combined with ours, he was admitted to a home. He stayed in the home a short time, left, had a severe hemorrhage on the street and died in the hospital to which he was taken before he could be admitted to a State sanatorium. We had no jail in which to keep him if we had possessed unquestionable power to seize him, nor could we allow him to upset all discipline at the hospital. In spite of all we had tried to do we received a letter from an enthusiastic citizen, partly as follows: —

> This case is typical and essentially requiring active treatment.
>
> . . . .
>
> It is most important that our health authorities should have the confidence of the community and be assisted properly, but ——— cannot set the law in motion without your aid, if indeed they should ever assume such action.
>
> I have the hope that this letter when duly considered will prevent any uncalled for distrust of our health officers.
>
> . . . .
>
> I see where there is power that if not exerted our City becomes a dangerous community as compared with another protected by law.

Our attempts to deal with these cases by court proceedings have been discouraging. Personally I believe that such cases as this will always be a source of worry until we are able to commit them in some way similar to that of disposing of the insane or the habitual drunkard.

The financial end of the tuberculosis problem seems never to concern anyone except the local board of health. With a twelve dollar tax limit, and say six of that to go by law to the school department and three and a half to the police and fire departments, there remain but two dollars and a half for streets, disposal of garbage and rubbish, parks and health. Rigid economy is absolutely necessary. Whether the new law regarding the tax levy will help out remains to be seen.

The aftercare of the consumptive is important. It is a question if the discharged patient should be provided for by the board of health alone or by somebody more interested in the purely economic side of the question. It depends on the particular case. At all events boards of health should not be too severely criticised for failure to act until they are properly notified of the discharge of such patients.

I have indicated the more important phases of our problem. The remedy is not for me to suggest. Until the efforts of local authorities who do their best are more fully recognized, boards of health will remain on the defensive and those inclined to shirk will continue inaggressive. Apropos is the proverb, "You can lead a horse to water but you can't make him drink."

Some day, I hope, the health laws of Massachusetts will be simplified and codified not entirely by those who have no practical knowledge of the local authorities' point of view. I hope, too, that we shall be treated fairly by all the State boards; that due consideration will be given the seriousness of the steadily increasing spirit of paternalism; and that we shall not be compelled by our law to provide a hospital for tuberculosis patients and be obliged by another law to pay for patients sent elsewhere at the will and pleasure of someone else. Persons whom we are supposed to control should not be able to say they will not do as we wish because they can pay their board a week or two at some other place and then stay on at our expense.

If we are to have responsibility let us have the authority and respect necessary for us to assume it properly.

REFERENCES.

1. Revised Laws, Chapter 75, Section 50; Acts 1905, Chapter 251; Acts 1907, Chapter 480.
2. Revised Laws, Chapter 75, Section 35; Acts 1906, Chapter 365; Acts 1911, Chapter 613; Acts 1912, Chapter 151.
3. Acts 1907, Chapter 474.
4. Revised Laws, Chapter 75, Section 43.
5. Folks: American Journal Public Health, II., No. 10, p. 776.
6. Callahan: Boston Medical and Surgical Journal, clxviii., No. 22, p. 794.

NEW LEGISLATION.

ACTS OF 1914, CHAPTER 177.

AN ACT RELATIVE TO THE CONTROL OF OPHTHALMIA NEONATORUM.

Section forty-nine of chapter seventy-five of the Revised Laws, as amended by section one of chapter two hundred and fifty-one of the acts of the year nineteen hundred and five, by chapter four hundred and eighty of the acts of the year nineteen hundred and seven, and by chapter two hundred and sixty-nine of the acts of the year nineteen hundred and ten, is hereby further amended by inserting after the word "necessary", in the twenty-second line, the words: — including, so far as may be possible, consultation with an oculist and the employment of a trained nurse, — so as to read as follows: — *Section 49.* A householder who knows that a person in his family or house is sick of smallpox, diphtheria, scarlet fever or any other infectious or contagious disease declared by the state board of health to be dangerous to the public health shall forthwith give notice thereof to the board of health of the city or town in which he dwells. Upon the death, recovery or removal of such person, the householder shall disinfect to the satisfaction of the board such rooms of his house and articles therein as, in the opinion of the board, have been exposed to infection or contagion. Should one or both eyes of an infant become inflamed, swollen and red, and show an unnatural discharge at any time within two weeks after its birth, it shall be the duty of the nurse, relative or other attendant having charge of such infant to report in writing within six hours thereafter, to the board of health of the city or town in which the parents of the infant reside, the fact that such inflammation, swelling and redness of the eyes and unnatural discharge exist. On receipt of such report, or of notice of the same symptoms given by a physician as provided by the following section, the board of health shall take such immediate action as it may deem necessary, including, so far as may be possible, consultation with an oculist and the employment of a trained nurse, in order that blindness may be prevented. Whoever violates the provisions of this section shall be punished by a fine of not more than one hundred dollars. But the board of health of a city or town may in its discretion, disinfect or fumigate all such premises as in the opinion of the board have been exposed to any infectious or contagious disease, at the expense of the city or town, and may employ any proper and competent person or corporation for the purpose of such disinfecting or fumigating. [*Approved March 16, 1914.*

ACTS OF 1914, CHAPTER 206.

AN ACT RELATIVE TO THE BRANDING OF CERTAIN CARCASSES AND OF PACKAGES CONTAINING MEAT.

SECTION 1. Section one hundred and three of chapter seventy-five of the Revised Laws, as set forth in chapter two hundred and twenty of the acts of the year nineteen hundred and three, and as amended by chapter four hundred and seventy-one of the acts of the year nineteen hundred and nine and by section five of chapter two hundred and ninety-seven of the acts of the year nineteen hundred and eleven, is hereby further amended by inserting after the word "therefor", in the fourteenth line, the words: — All packages containing meats so stamped or branded by the inspector as aforesaid shall, before they have been shipped from the slaughtering establishment, have properly secured to them a tag bearing the words "Massachusetts, Inspected, Passed", which tag may be so attached by the licensee, — and by inserting after the word "stamps", in the same line, the words: — and tags, — so as to read as follows: — *Section 103.* In a slaughtering establishment wherein inspection and branding are not carried on under the rules and regulations for the inspection of live stock and other products, established by the United States department of agriculture in accordance with acts of congress, the carcasses of animals slaughtered under the provisions of the four preceding sections shall at the time of slaughter, if not condemned, be stamped or branded by the inspector thereof in like manner as those inspected by the United States bureau of animal industry for interstate trade, by a stamp or brand designed for the purpose by the state board of health, which shall be furnished by it to the board of health of a city or town applying therefor. All packages containing meats so stamped or branded by the inspector as aforesaid shall, before they have been shipped from the slaughtering establishment, have properly secured to them a tag bearing the words

"Massachusetts, Inspected, Passed", which tag may be so attached by the licensee. Such stamps and tags shall be uniform in design throughout the commonwealth, but shall contain the name of the city or town in which they are used.

SECTION 2. This act shall take effect upon its passage. [*Approved March 19, 1914.*

ACTS OF 1914, CHAPTER 325.

AN ACT RELATIVE TO ESTABLISHMENTS FOR THE MANUFACTURE OF SAUSAGES OR CHOPPED MEAT, OR FOR THE BREAKING OR CANNING OF EGGS.

SECTION 1. The proprietor of every establishment for the manufacture of sausages or chopped meat of any kind, or for the breaking or canning of eggs, shall apply for a license to the mayor and aldermen of the city, the selectmen of the town, or, in a town having a population of more than five thousand, to the board of health, in which such establishment is situated. The application shall be in writing, signed and sworn to by one or more of the owners or by one or more of the persons carrying on such business or, if a corporation, by some authorized officer thereof, shall state the name and address of all the owners or persons carrying on said business, the situation of the establishment in which it is to be conducted and the nature of the products thereof to be sold or used for food. The board of health of a city or town may make and enforce such rules and regulations as it deems necessary for the conduct of all establishments mentioned in this act, and the license therefor may be revoked for any violation of such rules and regulations after notice to the licensee and a hearing before said board.

SECTION 2. Whoever carries on an establishment for the manufacture of sausages or chopped meat of any kind, or for the breaking or canning of eggs without a license as provided herein shall be punished by fine or imprisonment at the discretion of the court. [*Approved April 8, 1914.*

ACTS OF 1914, CHAPTER 408.

AN ACT TO STANDARDIZE TUBERCULOSIS DISPENSARIES.

Chapter five hundred and seventy-six of the acts of the year nineteen hundred and eleven is hereby amended by inserting after the word "situated", in the tenth line, the following: — and shall be inspected by and be satisfactory to the state board of health, — so as to read as follows: — Every city, and every town containing a population of ten thousand or more, as determined by the latest United States census, shall establish and maintain within its limits a dispensary for the discovery, treatment, and supervision of needy persons resident within its limits and afflicted with tuberculosis, unless there already exists in such city or town a dispensary which is satisfactory to the state board of health. The said dispensary shall be subject to the regulations of the boards of health of the cities or towns in which they are respectively situated, and shall be inspected by and be satisfactory to the state board of health. A city or town subject to the provisions of this act which, upon the request of the state board of health, refuses or neglects to comply with the provisions hereof, shall forfeit not more than five hundred dollars for every such refusal or neglect. [*Approved April 23, 1914.*

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APPROVED BY
THE STATE BOARD OF PUBLICATION.

RETURNS OF DISEASES.

Cases of Diseases declared by the State Board of Health to be Dangerous to the Public Health.

[Under the provisions of section 52 of chapter 75 of the Revised Laws.]

DISEASE.	Week ending —				
	Apr. 4.	Apr. 11.	Apr. 18.	Apr. 25.	Total.
Diphtheria,	132	126	111	125	494
Measles,	541	411	447	419	1,818
Scarlet fever,	414	343	342	318	1,417
Typhoid fever,	21	36	16	16	89
Tuberculosis, pulmonary (or not classified),	114	172	157	121	564
Tuberculous meningitis,	6	4	4	2	16
Tuberculosis, other forms,	10	15	10	8	43
Cerebro-spinal meningitis,	4	9	7	6	26
Whooping cough,	93	82	61	85	321
Varicella,	118	98	97	91	404
Ophthalmia neonatorum,	52	38	53	51	194
Anterior poliomyelitis,	1	1	3	2	7
Trachoma,	2	1	–	–	3
Smallpox,	6	–	–	–	6
Tetanus,	–	1	–	–	1
Pellagra,	–	–	1	–	1

Cases of Infectious Diseases not included in the Above Table.

[Cases not notifiable under the provisions of section 52 of chapter 75 of the Revised Laws.]

DISEASE.	Week ending —				
	Apr. 4.	Apr. 11.	Apr. 18.	Apr. 25.	Total.
Mumps,	42	22	6	17	87
Erysipelas,	3	3	–	1	7
Tonsillitis,	–	1	–	–	1

RETURNS OF DEATHS.

Deaths from Diseases declared by the State Board of Health to be Dangerous to the Public Health in Cities and Towns of More than 10,000 Population.

[Under the provisions of chapter 210, Acts of 1913.]

Week ending April 4, 1914.

CITIES AND TOWNS.	Population. Census for 1910.	Total Number reported.	Tuberculosis, Pulmonary (or not classified).	Tuberculous Meningitis.	Tuberculosis, Other Forms.	Diphtheria.	Typhoid Fever.	Scarlet Fever.	Measles.	Whooping Cough.	Cerebro-spinal Meningitis.
Boston,	686,092	47[1] 50[2]	24[1] 26[2]	5[1] 6[2]	5[1] 5[2]	5[1] 5[2]	2[1] 2[2]	2[1] 2[2]	2[1] 2[2]	1[1] 1[2]	1[1] 1[2]
Worcester,	145,986	5	2	-	-	-	1	-	-	1	1
Fall River,	119,295	9	5	1	-	1	1	1	-	-	-
Lowell,	106,294	5	2	1	-	1	-	-	1	-	-
Cambridge,	104,839	6	4	2	-	-	-	-	-	-	-
New Bedford,	96,652	5	4	1	-	-	-	-	-	-	-
Lynn,	89,336	4	1	1	-	2	-	-	-	-	-
Springfield,	88,926	3	3	-	-	-	-	-	-	-	-
Lawrence,	85,892	-	-	-	-	-	-	-	-	-	-
Somerville,	77,236	6	4	-	-	-	-	2	-	-	-
Holyoke,	57,730	3	1	-	-	1	-	-	-	1	-
Brockton,	56,878	1	1	-	-	-	-	-	-	-	-
Malden,	44,404	3	1	-	-	-	-	1	-	-	1
Haverhill,	44,115	1	1	-	-	-	-	-	-	-	-
Salem,	43,697	-	-	-	-	-	-	-	-	-	-
Newton,	39,806	1	-	-	1	-	-	-	-	-	-
Fitchburg,	37,826	-	-	-	-	-	-	-	-	-	-
Taunton,	34,259	1	1	-	-	-	-	-	-	-	-
Everett,	33,484	-	-	-	-	-	-	-	-	-	-
Quincy,	32,642	-	-	-	-	-	-	-	-	-	-
Chelsea,	32,452	4	2	-	-	2	-	-	-	-	-
Pittsfield,	32,121	3	2	-	-	-	-	-	-	-	1
Waltham,	27,834	-	-	-	-	-	-	-	-	-	-
Brookline,	27,792	-	-	-	-	-	-	-	-	-	-
Chicopee,	25,401	1	-	-	-	1	-	-	-	-	-
Gloucester,	24,398	-	-	-	-	-	-	-	-	-	-
Medford,	23,150	-	-	-	-	-	-	-	-	-	-
North Adams,	22,019	-	-	-	-	-	-	-	-	-	-
Northampton,	19,431	1	-	-	-	1	-	-	-	-	-
Beverly,	18,650	-	-	-	-	-	-	-	-	-	-
Revere,	18,219	-	-	-	-	-	-	-	-	-	-
Leominster,	17,580	1	1	-	-	-	-	-	-	-	-
Attleborough,	16,215	1	-	-	-	-	-	1	-	-	-
Westfield,	16,044	-[1] 2[2]	-[1] 2[2]	-	-	-	-	-	-	-	-
Peabody,	15,721	1	-	-	-	-	-	-	1	-	-
Melrose,	15,715	-	-	-	-	-	-	-	-	-	-
Woburn,	15,308	2	2	-	-	-	-	-	-	-	-
Newburyport,	14,949	2	1	-	1	-	-	-	-	-	-
Gardner,	14,699	-	-	-	-	-	-	-	-	-	-
Marlborough,	14,579	-	-	-	-	-	-	-	-	-	-
Clinton,	13,075	-	-	-	-	-	-	-	-	-	-
Milford,	13,055	-	-	-	-	-	-	-	-	-	-
Adams,	13,026	-	-	-	-	-	-	-	-	-	-
Framingham,	12,948	-	-	-	-	-	-	-	-	-	-
Weymouth,	12,895	-	-	-	-	-	-	-	-	-	-
Watertown,	12,875	-	-	-	-	-	-	-	-	-	-
Southbridge,	12,592	-	-	-	-	-	-	-	-	-	-
Plymouth,	12,141	-	-	-	-	-	-	-	-	-	-
Webster,	11,509	-	-	-	-	-	-	-	-	-	-
Methuen,	11,448	-	-	-	-	-	-	-	-	-	-
Wakefield,	11,404	-	-	-	-	-	-	-	-	-	-
Arlington,	11,187	-	-	-	-	-	-	-	-	-	-
Greenfield,	10,427	-	-	-	-	-	-	-	-	-	-
Winthrop,	10,132	-	-	-	-	-	-	-	-	-	-
Total of reporting towns,	1,997,070	121	66	12	7	14	4	7	4	3	4

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[1] Nonresidents deducted.

[2] Total deaths.

Week ending April 11, 1914.

CITIES AND TOWNS.	Population. Census for 1910.	Total Number reported.	Tuberculosis, Pulmonary (or not classified).	Tuberculous Meningitis.	Tuberculosis, Other Forms.	Diphtheria.	Typhoid Fever.	Scarlet Fever.	Measles.	Whooping Cough.	Cerebro-spinal Meningitis.
Boston, ...	686,092	26[1] 32[2]	18[1] 22[2]	– 1[2]	3[1] 3[2]	2[1] 3[2]	1[1] 1[2]	1[1] 1[2]	1[1] 1[2]	– –	– –
Worcester, ...	145,986	3	–	1	1	–	–	–	1	–	–
Fall River, ...	119,295	8	5	–	–	1	–	–	–	1	1
Lowell, ...	106,294	4	1	–	1	–	1	–	–	–	1
Cambridge, ...	104,839	9	8	–	–	–	–	–	–	–	1
New Bedford, ...	96,652	8	5	–	–	1	–	1	–	–	1
Lynn, ...	89,336	–	–	–	–	–	–	–	–	–	–
Springfield, ...	88,926	3	2	–	–	1	–	–	–	–	–
Lawrence, ...	85,892	–	–	–	–	–	–	–	–	–	–
Somerville, ...	77,236	1	1	–	–	–	–	–	–	–	–
Holyoke, ...	57,730	1	1	–	–	–	–	–	–	–	–
Brockton, ...	56,878	3	1	–	–	1	1	–	–	–	–
Malden, ...	44,404	2	2	–	–	–	–	–	–	–	–
Haverhill, ...	44,115	3	3	–	–	–	–	–	–	–	–
Salem, ...	43,697	–	–	–	–	–	–	–	–	–	–
Newton, ...	39,806	–	–	–	–	–	–	–	–	–	–
Fitchburg, ...	37,826	–	–	–	–	–	–	–	–	–	–
Taunton, ...	34,259	2	2	–	–	–	–	–	–	–	–
Everett, ...	33,484	1	–	–	–	1	–	–	–	–	–
Quincy, ...	32,642	–	–	–	–	–	–	–	–	–	–
Chelsea, ...	32,452	2	–	1	1	–	–	–	–	–	–
Pittsfield, ...	32,121	2	2	–	–	–	–	–	–	–	–
Waltham, ...	27,834	1	–	1	–	–	–	–	–	–	–
Brookline, ...	27,792	–	–	–	–	–	–	–	–	–	–
Chicopee, ...	25,401	1	1	–	–	–	–	–	–	–	–
Gloucester, ...	24,398	–	–	–	–	–	–	–	–	–	–
Medford, ...	23,150	1	–	–	–	1	–	–	–	–	–
North Adams, ...	22,019	–	–	–	–	–	–	–	–	–	–
Northampton, ...	19,431	–	–	–	–	–	–	–	–	–	–
Beverly, ...	18,650	–	–	–	–	–	–	–	–	–	–
Revere, ...	18,219	–	–	–	–	–	–	–	–	–	–
Leominster, ...	17,580	–	–	–	–	–	–	–	–	–	–
Attleborough, ...	16,215	–	–	–	–	–	–	–	–	–	–
Westfield, ...	16,044	1[1] 3[2]	1[1] 3[2]	– –	– –	– –	– –	– –	– –	– –	– –
Peabody, ...	15,721	–	–	–	–	–	–	–	–	–	–
Melrose, ...	15,715	–	–	–	–	–	–	–	–	–	–
Woburn, ...	15,308	–	–	–	–	–	–	–	–	–	–
Newburyport, ...	14,949	–	–	–	–	–	–	–	–	–	–
Gardner, ...	14,699	–	–	–	–	–	–	–	–	–	–
Marlborough, ...	14,579	–	–	–	–	–	–	–	–	–	–
Clinton, ...	13,075	–	–	–	–	–	–	–	–	–	–
Milford, ...	13,055	–	–	–	–	–	–	–	–	–	–
Adams, ...	13,026	–	–	–	–	–	–	–	–	–	–
Framingham, ...	12,948	–	–	–	–	–	–	–	–	–	–
Weymouth, ...	12,895	–	–	–	–	–	–	–	–	–	–
Watertown, ...	12,875	–	–	–	–	–	–	–	–	–	–
Southbridge, ...	12,592	–	–	–	–	–	–	–	–	–	–
Plymouth, ...	12,141	–	–	–	–	–	–	–	–	–	–
Webster, ...	11,509	1	1	–	–	–	–	–	–	–	–
Methuen, ...	11,448	1	–	–	1	–	–	–	–	–	–
Wakefield, ...	11,404	–	–	–	–	–	–	–	–	–	–
Arlington, ...	11,187	–	–	–	–	–	–	–	–	–	–
Greenfield, ...	10,427	–	–	–	–	–	–	–	–	–	–
Winthrop, ...	10,132	–	–	–	–	–	–	–	–	–	–
Total of reporting towns, . .	1,876,149	92	60	4	7	9	3	2	2	1	4

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[1] Nonresidents deducted.

[2] Total deaths.

Week ending April 18, 1914.

CITIES AND TOWNS.	Population. Census for 1910.	Total Number reported.	Tuberculosis, Pulmonary (or not classified).	Tuberculous Meningitis.	Tuberculosis, Other Forms.	Diphtheria.	Typhoid Fever.	Scarlet Fever.	Measles.	Whooping Cough.	Cerebro-spinal Meningitis.
Boston,	686,092	18[1] 22[2]	14[1] 15[2]	– 1[2]	– 1[2]	1[1] 1[2]	1[1] 1[2]	1[1] 2[2]	– –	– –	1[1] 1[2]
Worcester,	145,986	11	6	1	–	–	–	1	2	–	1
Fall River,	119,295	2	1	–	–	–	–	–	–	–	1
Lowell,	106,294	2	2	–	–	–	–	–	–	–	–
Cambridge,	104,839	7	5	–	2	–	–	–	–	–	–
New Bedford,	96,652	4	2	–	1	1	–	–	–	–	–
Lynn,	89,336	1	–	–	–	–	–	–	–	1	–
Springfield,	88,926	–	–	–	–	–	–	–	–	–	–
Lawrence,	85,892	–	–	–	–	–	–	–	–	–	–
Somerville,	77,236	1	1	–	–	–	–	–	–	–	–
Holyoke,	57,730	1	1	–	–	–	–	–	–	–	–
Brockton,	56,878	3	–	–	2	–	–	–	1	–	–
Malden,	44,404	–	–	–	–	–	–	–	–	–	–
Haverhill,	44,115	3	2	–	1	–	–	–	–	–	–
Salem,	43,697	–	–	–	–	–	–	–	–	–	–
Newton,	39,806	–	–	–	–	–	–	–	–	–	–
Fitchburg,	37,826	–	–	–	–	–	–	–	–	–	–
Taunton,	34,259	4	4	–	–	–	–	–	–	–	–
Everett,	33,484	4	4	–	–	–	–	–	–	–	–
Quincy,	32,642	–	–	–	–	–	–	–	–	–	–
Chelsea,	32,452	1	1	–	–	–	–	–	–	–	–
Pittsfield,	32,121	–	–	–	–	–	–	–	–	–	–
Waltham,	27,834	1	–	–	–	1	–	–	–	–	–
Brookline,	27,792	–	–	–	–	–	–	–	–	–	–
Chicopee,	25,401	1	–	–	–	–	–	–	–	1	–
Gloucester,	24,398	–	–	–	–	–	–	–	–	–	–
Medford,	23,150	2	–	–	–	–	–	2	–	–	–
North Adams,	22,019	–	–	–	–	–	–	–	–	–	–
Northampton,	19,431	2	–	–	1	–	–	–	–	–	1
Beverly,	18,650	1	1	–	–	–	–	–	–	–	–
Revere,	18,219	–	–	–	–	–	–	–	–	–	–
Leominster,	17,580	–	–	–	–	–	–	–	–	–	–
Attleborough,	16,215	1	–	–	–	–	–	–	–	–	1
Westfield,	16,044	1[1] 3[2]	– 2[2]	– –	– –	– –	– –	– –	1[1] 1[2]	– –	– –
Peabody,	15,721	2	2	–	–	–	–	–	–	–	–
Melrose,	15,715	–	–	–	–	–	–	–	–	–	–
Woburn,	15,308	1	1	–	–	–	–	–	–	–	–
Newburyport,	14,949	–	–	–	–	–	–	–	–	–	–
Gardner,	14,699	–	–	–	–	–	–	–	–	–	–
Marlborough,	14,579	–	–	–	–	–	–	–	–	–	–
Clinton,	13,075	1	–	–	–	–	–	–	–	–	1
Milford,	13,055	–	–	–	–	–	–	–	–	–	–
Adams,	13,026	–	–	–	–	–	–	–	–	–	–
Framingham,	12,948	1	1	–	–	–	–	–	–	–	–
Weymouth,	12,895	1	–	–	–	–	–	–	–	1	–
Watertown,	12,875	–	–	–	–	–	–	–	–	–	–
Southbridge,	12,592	–	–	–	–	–	–	–	–	–	–
Plymouth,	12,141	–	–	–	–	–	–	–	–	–	–
Webster,	11,509	–	–	–	–	–	–	–	–	–	–
Methuen,	11,448	–	–	–	–	–	–	–	–	–	–
Wakefield,	11,404	2	1	–	1	–	–	–	–	–	–
Arlington,	11,187	–	–	–	–	–	–	–	–	–	–
Greenfield,	10,427	–	–	–	–	–	–	–	–	–	–
Winthrop,	10,132	–	–	–	–	–	–	–	–	–	–
Total of reporting towns,	1,912,724	85	52	2	9	3	1	5	4	3	6

[1] Nonresidents deducted.

[2] Total deaths.

Week ending April 25, 1914.

CITIES AND TOWNS.	Population. Census for 1910.	Total Number reported.	Tuberculosis, Pulmonary (or not classified).	Tuberculous Meningitis.	Tuberculosis, Other Forms.	Diphtheria.	Typhoid Fever.	Scarlet Fever.	Measles.	Whooping Cough.	Cerebro-spinal Meningitis.
Boston,	686,092	35[3] 38[4]	20[1] 21[2]	3[1] 4[2]	2[1] 3[2]	3[1] 3[2]	– –	– –	4[1] 4[2]	1[1] 1[2]	1[1] 1[2]
Worcester,	145,986	7	2	1	2	1	–	–	1	–	–
Fall River,	119,295	4	3	–	–	–	–	–	–	1	–
Lowell,	106,294	4	3	1	–	–	–	–	–	–	–
Cambridge,	104,839	5	–	3	–	1	–	–	–	1	–
New Bedford,	96,652	5	5	–	–	–	–	–	–	–	–
Lynn,	89,336	4	1	–	1	1	–	–	–	1	–
Springfield,	88,926	4[5]	2	–	1	–	–	–	–	–	–
Lawrence,	85,892	–	–	–	–	–	–	–	–	–	–
Somerville,	77,236	3	1	–	1	–	–	1	–	–	–
Holyoke,	57,730	6	2	–	–	4	–	–	–	–	–
Brockton,	56,878	3	1	1	–	–	–	–	–	1	–
Malden,	44,404	1	–	–	–	1	–	–	–	–	–
Haverhill,	44,115	–	–	–	–	–	–	–	–	–	–
Salem,	43,697	–	–	–	–	–	–	–	–	–	–
Newton,	39,806	–	–	–	–	–	–	–	–	–	–
Fitchburg,	37,826	–	–	–	–	–	–	–	–	–	–
Taunton,	34,259	1	–	1	–	–	–	–	–	–	–
Everett,	33,484	–	–	–	–	–	–	–	–	–	–
Quincy,	32,642	–	–	–	–	–	–	–	–	–	–
Chelsea,	32,452	4	3	–	–	1	–	–	–	–	–
Pittsfield,	32,121	1	–	–	–	1	–	–	–	–	–
Waltham,	27,834	–	–	–	–	–	–	–	–	–	–
Brookline,	27,792	1	–	–	–	1	–	–	–	–	–
Chicopee,	25,401	–	–	–	–	–	–	–	–	–	–
Gloucester,	24,398	–	–	–	–	–	–	–	–	–	–
Medford,	23,150	2	1	1	–	–	–	–	–	–	–
North Adams,	22,019	–	–	–	–	–	–	–	–	–	–
Northampton,	19,431	1	1	–	–	–	–	–	–	–	–
Beverly,	18,650	–	–	–	–	–	–	–	–	–	–
Revere,	18,219	–	–	–	–	–	–	–	–	–	–
Leominster,	17,580	–	–	–	–	–	–	–	–	–	–
Attleborough,	16,215	1	–	1	–	–	–	–	–	–	–
Westfield,	16,044	–[1] 1[2]	–[1] 1[2]	– –	– –	– –	– –	– –	– –	– –	– –
Peabody,	15,721	–	–	–	–	–	–	–	–	–	–
Melrose,	15,715	–	–	–	–	–	–	–	–	–	–
Woburn,	15,308	–	–	–	–	–	–	–	–	–	–
Newburyport,	14,949	1	1	–	–	–	–	–	–	–	–
Gardner,	14,699	–	–	–	–	–	–	–	–	–	–
Marlborough,	14,579	–	–	–	–	–	–	–	–	–	–
Clinton,	13,075	–	–	–	–	–	–	–	–	–	–
Milford,	13,055	–	–	–	–	–	–	–	–	–	–
Adams,	13,026	1	–	–	–	–	–	–	1	–	–
Framingham,	12,948	–	–	–	–	–	–	–	–	–	–
Weymouth,	12,895	–	–	–	–	–	–	–	–	–	–
Watertown,	12,875	–	–	–	–	–	–	–	–	–	–
Southbridge,	12,592	–	–	–	–	–	–	–	–	–	–
Plymouth,	12,141	–	–	–	–	–	–	–	–	–	–
Webster,	11,509	–	–	–	–	–	–	–	–	–	–
Methuen,	11,448	–	–	–	–	–	–	–	–	–	–
Wakefield,	11,404	–	–	–	–	–	–	–	–	–	–
Arlington,	11,187	–	–	–	–	–	–	–	–	–	–
Greenfield,	10,427	–	–	–	–	–	–	–	–	–	–
Winthrop,	10,132	–	–	–	–	–	–	–	–	–	–
Total of reporting towns,	1,903,107	98	48	13	8	14	–	1	6	5	1

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[1] Nonresidents deducted.

[2] Total deaths.

[3] Non-residents deducted: one death from anterior poliomyelitis.

[4] Total deaths: one death from anterior poliomyelitis.

[5] One death from anterior poliomyelitis.

Deaths from Diseases declared by the State Board of Health to be Dangerous to the Public Health in Towns of Less than 10,000 Population.

[Under the provisions of chapter 210, Acts of 1913.]

DISEASE.	Place.	Week ending —			
		Apr. 4.	Apr. 11.	Apr. 18.	Apr. 25.
Tuberculosis, pulmonary (or not classified).	Bridgewater, .	–	1	–	1
	Dalton, . .	–	–	1	–
	Danvers, . .	1	–	–	–
	Douglas, . .	–	–	1	–
	Dudley, . .	–	–	–	1
	Erving, . .	–	–	–	1
	Essex, . .	–	1	–	–
	Falmouth, . .	1	–	–	–
	Ipswich, . .	–	–	1	–
	Marblehead, .	–	–	1	–
	Medfield, . .	–	–	4	–
	Montague, . .	–	1	–	–
	Oxford, . .	–	1	–	–
	Rockport, . .	1	–	–	–
	Sandwich, . .	–	–	1	–
	Saugus, . .	–	–	–	1
	Topsfield, . .	–	–	–	1
	Wellesley, . .	–	–	1	–
	Whitman, . .	–	1	–	–
	Winchendon, .	–	–	–	1
	Winchester, .	–	–	1	–
Total, . . .	. . . . .	3	5	11	6
Tuberculosis, other forms.	Bernardston, .	–	–	–	1
	Bridgewater, .	2	–	–	–
	Saugus, . .	–	–	–	1
Total, . . .	. . . . .	2	–	–	2
Diphtheria, . .	Blackstone, .	–	–	–	1
	Danvers, . .	–	–	2	–
Total, . . .	. . . . .	–	–	2	1
Typhoid fever, . .	Wenham, . .	1	–	–	1
Scarlet fever, . .	Seekonk, . .	–	2	–	–
Measles, . . .	Dedham, . .	–	–	1	–
Cerebro-spinal meningitis.	Lexington, . .	–	–	–	1
	Winchendon, .	1	–	–	–
	Winchester, .	–	–	1	–
Total, . . .	. . . . .	1	–	1	1
Smallpox, . . .	Winchendon, .	1	–	–	–

REPORT ON INSPECTION OF FOOD AND DRUGS.

Laboratory Examinations of Food and Drugs.

The following tables present the results of the laboratory examinations during the month of April, 1914, of samples of food and drugs collected by inspectors of the Board: —

The cities and towns in which samples were collected were: Acton, Adams, Attleborough, Billerica, Boston, Brockton, Cambridge, Danvers, Fall River, Franklin, Gardner, Gloucester, Harvard, Lowell, Lynn, Malden, Marlborough, Nahant, Natick, North Attleborough, Pittsfield, Rockland, Salem, Shelburne, Sherborn, Somerville, Stoneham.

Summary of Analysis.

Articles examined.	Number found to be of Good Quality.	Number adulterated or varying from the Legal Standard.	Total.
Baking powder,	2	–	2
Canned vegetables,	2	–	2
Canned fish,	1	1	2
Cocoa,	14	1	15
Coffee,	2	–	2
Condensed milk,	5	2	7
Confectionery,	2	1	3
Cream,	15	–	15
Cream of tartar,	1	–	1
Drugs,	73	21	94
Flavoring extracts: —			
Lemon,	1	–	1
Maple,	1	–	1
Peppermint,	3	–	3
Wintergreen,	3	–	3
Gelatine,	1	–	1
Ice cream,	2	–	2
Jams and jellies,	3	1	4
Maple sugar,	11	4	15
Maple syrup,	1	–	1
Meat products: —			
Ham,	–	2	2
Mince meat,	1	–	1
Pressed meat,	1	–	1
Sausages,	40	13	53
Milk,	326	68	394
Shrimp,	2	6	8
Spices,	3	–	3
Totals,	516	120	636

PROSECUTIONS FOR VIOLATIONS OF THE LAW RELATING TO FOOD AND DRUGS.

Fifteen convictions were secured during the month of April, 1914, for selling adulterated food and drugs, as follows: —

No.	NAME OF DEFENDANT.	Place.	Character of Article sold.
1	John Laurecella,	Malden,	Cider (benzoic acid).
2	Ralph Gabarino,	Pittsfield,	Compound maple sugar (not marked).
3	D. Frank Buckley,	Malden,	Essence peppermint (not U. S. P.).[1]
4	Robert W. Stowell,	Lowell,	Milk (total solids, 10.12).[2], [3]
5	Robert W. Stowell,	Lowell,	Milk (total solids, 11.26).[2], [3]
6	Harold S. McIntire,	Stoneham,	Milk (total solids, 11.20).
7	James Smith,	Lowell,	Sausage (colored).
8	Charles E. Seymour,	Pittsfield,	Skimmed milk (not marked).
9	William S. Noble,	Pittsfield,	Skimmed milk (not marked).
10	George B. Sutherland,	Boston,	Spirit of nitrous ether (not U. S. P.).
11	William R. Canfield,	Medford,	Spirit of nitrous ether (not U. S. P.).[1]
12	P. Noe Brunelle,	Lowell,	Spirit of nitrous ether (not U. S. P.).
13	Rufus E. Bellows,	Boston,	Spirit of peppermint (not U. S. P.).
14	Henry M. Maxwell,	Somerville,	Tincture of iodine (not U. S. P.).
15	William H. Knight,	Boston,	Tincture of iodine (not U. S. P.).

[1] Appealed. [2] Watered. [3] Contained salt.

Fines imposed, $395.

LIST OF SAMPLES OF FOOD, DRUGS AND MILK EXAMINED DURING THE MONTH OF APRIL, 1914.

Samples of Food in which No Adulteration was detected.

BAKING POWDER.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
23987	Crofts & Reed, Chicago, Ill.,	C. & R. Crofts & Reed, Chicago, Ill.
23988	Crofts & Reed, Chicago, Ill.,	C. & R. Crofts & Reed, Chicago, Ill.

CANNED FRUITS AND VEGETABLES.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
23984	Crofts & Reed, Chicago, Ill.,	C. & R. Pork and Beans. Crofts & Reed, Chicago, Ill.
24156	Italian Fruit Store, Main Street, Marlborough, Mass.	William's Pork and Beans. The William's Bros. Company, Michigan.

Samples of Food in which No Adulteration was detected — Continued.

CLAM BROTH.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
6319-S	W. & A. Bacon Company, Boston,	Banquet Clam Broth. E. S. Burnham Company, New York.

COCOA.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
23686	Adams Bros., Needham,	Runkel's. Runkel Bros., New York.
23687	Adams Bros., Needham,	Two Star.
23688	Adams Bros., Needham,	Mosher.
23854	Crofts & Reed, Chicago, Ill.,	C. & R. Crofts & Reed, Chicago, Ill.
23690	Crossman & Co., Needham,	Orinoco. Wm. F. Flanders, Boston.
23736	Fallon Bros., Springfield,	Cream. Fallon Bros., Springfield.
6295-S	Great Ceylon Tea Company, Boston,	Old Dutch.
23738	King's Public Market, Springfield,	Stollwerck's. Stollwerck Bros., New York.
23737	B. Missott, Springfield	Hooton. Hooton Cocoa Company, New Jersey.
23782	F. P. Reynolds, Salem,	Williams.
23691	Yerxa Branch, Watertown,	Royal. Brewster Manufacturing Company, New Jersey.
23692	Yerxa Branch, Watertown,	Ibis. Ph. Suchard, Switzerland.
23693	Yerxa Branch, Watertown,	Tudor.
23694	Yerxa Branch, Watertown,	Frye's.
23602	S. S. Pierce & Co., Boston,	Van Houten. Van Houten & Zoon, Weesp-Holland.
6293-S	Great Ceylon Tea Company, Boson,	White Lilly.

COFFEE.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
24232	Direct Importing Company, Marlborough.	

CONFECTIONERY.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
6709-S	Thorndike Confectionery Company, Lowell,	Candy Kisses.

CREAM OF TARTAR.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
q 13392	A. D. Ross, Boston,	

FLAVORING EXTRACTS.

Lemon.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
24010	Crofts & Reed, Chicago, Ill.,	C .& R. Crofts & Reed, Chicago, Ill.

Peppermint.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
24161	L. Carpenter, Attleborough,	Geo. L. Claffin Company, Providence, R. I.
24008	Crofts & Reed, Chicago, Ill.,	C. & R. Crofts & Reed, Chicago, Ill.
24158	Direct Importing Company, Marlborough,	Benefit. Direct Importing Company, Boston.

Wintergreen.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
24160	L. Carpenter, Attleborough,	Henry's. Geo. L. Claffin Company, Providence, R. I.
24007	Crofts & Reed, Chicago, Ill.,	C. & R. Crofts & Reed, Chicago, Ill.
24157	Direct Importing Company, Marlborough,	Benefit. Direct Importing Company, Boston.

Samples of Food in which No Adulteration was detected — Continued.

ICE CREAM.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
6575-S	Wm. R. Hagyard, Pittsfield,	Albany Ice Cream Company.
6577-S	Wm. R. Hagyard, Pittsfield.	

JAMS AND JELLIES.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
6747-S	Cobb, Bates & Yerxa, Boston,	Preserved Strawberries. Oneida Community Limited, Oneida, N. Y.
6749-S	Cobb, Bates & Yerxa, Boston,	Preserved Raspberries.
23983	Crofts & Reed, Chicago, Ill.,	C. & R. Orange Marmalade. Crofts & Reed, Chicago, Ill.

MAPLE SUGAR.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
24058	W. & A. Bacon Co., Boston.	
6605-S	Cobb, Bates & Yerxa, Boston.	
24162	Downey Bros., Marlborough.	
24232	F. G. Fay Company, Marlborough.	
6585-S	Fruit Dealer.	
6655-S	Fruit Store, Stoneham Square, Stoneham.	
6713-S	Alex Janovich & Co., Lowell.	
6653-S	W. C. Witcher, Stoneham.	
24243	Towne & Lindman, Boston.	

MAPLE SYRUP.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
24242	Towne & Lindman, Boston.	

MEAT PRODUCTS.

Mince Meat.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
24041	Shepherd & Co., Gloucester,	Majestic. Sulzberger & Sons Company, U. S. A.

Sausage.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
24061	W. & A. Bacon Company, Boston,	Pressed Meat.
6489-S	Marshall, Lawrence,	Tomato Sausage.

Frankfort Sausage.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
24062	W. & A. Bacon Company, Boston.	
6493-S	Barrett's Market, Lawrence.	
24014	Blackstone Public Market, Boston.	
24015	Central Market, Boston.	
24086	F. W. Clark, Attleborough.	
24087	F. W. Clark, Attleborough.	
6711-S	Arthur Greenwood, Lowell.	
24085	E. V. Hicks, Attleborough.	
24103	The New Public Market, Attleborough.	
24012	Stark Supply Company, Boston.	
24022	Sterling Cash Market, Boston.	
24235	Canton Market, Boston.	
24236	Washington Public Market, Boston.	
24239	Washington Provision Company, Boston.	
24240	Vincent Market, Boston.	

Samples of Food in which No Adulteration was detected — Concluded.

MEAT PRODUCTS — Concluded.

Pork Sausage.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
24016	Central Market, Boston.	
6587–S	A. J. Cunningham & Co., Boston.	
24084	E. V. Hicks, Attleborough.	
24102	The New Public Market, Attleborough.	
24039	Shepherd & Co., Gloucester.	
24011	Stark Supply Company, Boston.	
24021	Sterling Cash Market, Boston.	
24237	Washington Public Market, Boston.	

SPICES.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
6323–S	W. & A. Bacon Company, Boston, ...	Mace.
24230	Direct Importing Company, Marlborough, . .	Benefit White Pepper.
24231	Direct Importing Company, Marlborough. . .	Benefit Mace.

TABLE SAUCES.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
23986	Crofts & Reed, Chicago, Ill., ...	C. & R. Worcestershire Sauce. Crofts & Reed, Chicago, Ill.

Samples of Food which upon Examination were found to be labeled in Accordance with the Law.

FLAVORING EXTRACTS.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
23998	Crofts & Reed, Chicago, Ill., ...	C. & R. Imitation Maple Flavor. Crofts & Reed, Chicago, Ill.

GELATINE.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
6759–S	Cobb, Bates & Yerxa, Boston, ...	Victoria. Cobb, Bates & Yerxa, Boston.

MEAT PRODUCTS.

Sausage.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
6487–S	Ideal Market, Lawrence, ...	Tomato Sausage. Marked "5 per cent. cereal."
6485–S	Peter Reeves, Lawrence, ...	Tomato Sausage. Marked "with cereal."

SYRUPS.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
24060	W. & A. Bacon Company, Boston, ...	Falcon Raspberry Beverage. Falcon Packing Company, New York.
6321–S	W. & A. Bacon Company, Boston, ...	Nu-Drink Cherryade. Moody Extract Company, Swampscott, Mass.

Samples of Food which upon Examination were found to be adulterated.

CONFECTIONERY (CONTAINING PARAFFIN).

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
6625-S	Terminal Company, Boston, ...	Candy Kisses.

MAPLE SUGAR (CONTAINING CANE SUGAR).

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
6581-S	Fruit Dealer, 58 West Street, Pittsfield.	
6579-S	Fruit Store, 58 West Street, Pittsfield.	
6715-S	P. Statuto, Lowell.	
6627-S	Terminal Company, Boston.	

MEAT PRODUCTS (CONTAINING CEREAL).

Sausage.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
6657-S	H. Lockwood & Co., Boston,[1]	Bay State Packing Company, Boston.
6491-S	Marshall's, Lawrence.[2]	
6495-S	Parkers Pork Store, Lawrence.[3]	

Frankfort Sausage.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
24019	F. & M. Meat Company, Boston.[2]	
24040	Shepherd & Co., Gloucester.[2]	
24018	Western Beef Company, Boston.[2]	

Pork Sausage.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
24238	Washington Provision Company, Boston.	
24013	Blackstone Public Market, Boston.	
24020	F. & M. Meat Company, Boston.	
24017	Western Beef Company, Boston.	
24234	Canton Market, Boston.	

Samples of Drugs in which No Adulteration was detected.

ALCOHOL.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
23917	Fox Bros., Boston.	
24241	T. Kelty & Co., Boston.	

BORAX.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
23837	Crofts & Reed, Chicago, Ill., ...	Crofts & Reed, Chicago, Ill.

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[1] Contained more than 2 per cent. cereal (3.81 per cent. starch).

[2] Contained added starch.

[3] Colored; contained cereal.

Samples of Drugs in which No Adulteration was detected — Continued.

BAY RUM.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
23991	Crofts & Reed, Chicago, Ill., ...	Crofts & Reed, Chicago, Ill.

CAMPHOR LINIMENT.

q 13488	Berkley Drug Company, Boston.	
q 13491	J. G. Godding & Co., Boston.	
q 13482	A. D. Ross, Boston.	
q 13489	S. A. D. Sheppard & Co., Boston.	
q 13485	A. G. Trafton, Boston.	

GLYCERINE.

24064	W. & A. Bacon Company, Boston.	
24005	Crofts & Reed Company, Chicago, Ill., . .	Crofts & Reed, Chicago, Ill.

QUININE PILLS.

24065	W. & A. Bacon Company, Boston, . . .	Keasbey & Mattison, Ambler, Pa.
23999	Crofts & Reed, Chicago, Ill., ...	Crofts & Reed, Chicago, Ill.

SPIRIT OF ANISE.

q 13484	H. D. Huggan Company, Boston.	
24204	C. H. Packard, East Boston.	
q 13490	S. A. D. Sheppard & Co., Boston.	
q 13396	John T. Tobin, South Boston.	
q 13532	Walker-Rintels drug store, Boston.	

SPIRIT OF NITROUS ETHER.

q 13436	R. E. Bellows, Neponset.	
q 13434	Brody's Pharmacy, Dorchester.	
24188	Thos. F. Coady & Co., North Attleborough.	
6499-S	Matthew J. Daley, Lawrence.	
24179	Wm. J. Duffy, Attleborough.	
24202	Mrs. C. L. Fraser & Son, East Boston.	
q 13500	Garland Pharmacy, Gardner.	
24191	F. H. Gould Drug Store, North Attleborough.	
24187	Kivlin & Dunn, North Attleborough.	
24175	Thos. O. Mullaly, Attleborough.	
q 13496	W. A. Phillips, Rockland.	
24174	Edmund Reeves, Attleborough.	
q 13479	S. J. Siegel Company, Boston.	
24178	John T. Timmons, Attleborough.	

SPIRIT OF PEPPERMINT.

q 13477	Appleton Pharmacy, Boston.	
24181	Attleborough Drug Company, Attleborough.	
q 13437	Walter N. Baker, Dorchester.	
q 13398	Bispham Pharmacy, South Boston.	
24172	S. P. Clarke & Co., Attleborough.	
24189	Thos. F. Coady & Co., North Attleborough.	
24203	Mrs. C. L. Fraser & Son, East Boston.	
q 13394	Hoffman Pharmacy, Boston.	
q 13483	H. D. Huggan Drug Company, Boston.	
24186	Edward J. Kivlin, North Attleborough.	

Samples of Drugs in which No Adulteration was detected — Concluded.

SPIRIT OF PEPPERMINT — Concluded.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
24176	Thomas O. Mullaly, Attleborough.	
24180	Opera House Drug Company, Attleborough.	
q 13495	William A. Phillips, Rockland.	
24173	Edmund Reeves, Attleborough.	
q 13504	Reliable Drug Store, Gardner.	
q 13480	S. J. Siegel Company, Boston.	
q 13508	Smart's Pharmacy, Gardner.	
24177	John T. Timmons, Attleborough.	
24185	Watson, the Druggist, North Attleborough.	
q 13530	C. W. Mitchell & Co., Boston.	

SPIRIT OF WINTERGREEN.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
24182	Attleborough Drug Company, Attleborough.	
q 13399	Daniel E. Barry, South Boston.	

TINCTURE OF IODINE.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
q 13476	Appleton Pharmacy, Boston.	
q 13400	Broadway Pharmacy, South Boston.	
6613-S	Commonwealth Pharmacy, Boston.	
q 13486	W. L. Conwell, Boston.	
q 13503	Crystal Drug Company, Gardner.	
q 13397	Chas. A. Dailey, South Boston.	
q 13499	Drug Store, Braintree.	
q 13507	Gardner Drug Company, Gardner.	
q 13501	Garland Pharmacy, Gardner.	
6615-S	L. M. Geddes & Co., Boston.	
q 13492	J. D. Godding Company, Boston.	
q 13494	W. A. Phillips, Rockland.	
q 13393	Arthur D. Ross, Boston.	
q 13481	Arthur D. Ross, Boston.	
24188	Attleborough Drug Company, Attleborough.	

WITCH HAZEL.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
24063	W. & A. Bacon Company, Boston, . . .	The Arthur Chemical Company, New Haven, Conn.
23993	Crofts & Reed, Chicago, Ill., ...	Crofts & Reed, Chicago, Ill.

Samples of Drugs which upon Examination were found to be adulterated.

CAMPHOR LINIMENT.

Number of Sample.	DEALER.	Wholesaler or Manufacturer.	Per Cent. of required Strength.
23995	Crofts & Reed, Chicago, Ill., ...	Crofts & Reed, Chicago, Ill.	71

HYDROGEN DIOXIDE.

Number of Sample.	DEALER.	Wholesaler or Manufacturer.	Per Cent. of required Strength.
23992	Crofts & Reed, Chicago, Ill., ...	Crofts & Reed, Chicago, Ill.	81

Samples of Drugs which upon Examination were found to be adulterated — Concluded.

SPIRIT OF ANISE.

Number of Sample.	DEALER.	Wholesaler or Manufacturer.	Per Cent. of required Strength.
q 13438	Walter N. Baker, Dorchester, ...	– –	81
q 13456	Choate Drug Company, Boston, . . .	– –	81

SPIRIT OF CAMPHOR.

Number of Sample.	DEALER.	Wholesaler or Manufacturer.	Per Cent. of required Strength.
24006	Crofts & Reed, Chicago, Ill., ...	– –	65

SPIRIT OF NITROUS ETHER.

Number of Sample.	DEALER.	Wholesaler or Manufacturer.	Per Cent. of required Strength.
q 13455	Choate Drug Company, Boston, . . .	– –	70
q 13493	D. M. O'Brien, Rockland, ...	– –	23

SPIRIT OF PEPPERMINT.

Number of Sample.	DEALER.	Wholesaler or Manufacturer.	Per Cent. of required Strength.
q 13435	R. E. Bellows, Dorchester, ...	– –	46

TINCTURE OF IODINE.

Number of Sample.	DEALER.	Wholesaler or Manufacturer.	Per Cent. of required Strength.
q 13487	Berkley Drug Company, Boston, . . .	– –	74
q 13454	Wm. H. Knight, Boston, ...	– –	74
q 13478	S. J. Siegel Company, Boston, ...	– –	84
q 13323	B. M. Wollenberg, Boston, ...	– –	74

Samples of Milk which upon Examination were found to be adulterated.

Number of Sample.	Name of Dealer, Wholesaler or Producer.	Results of Analyses.
6679–S	Albert Brown, West Acton, . . .	Total solids, 11.16 per cent.; fat, 3.35 per cent.; contained added water.
6673–S	Michael McMahon, West Acton, . .	Total solids, 7.74 per cent.; fat, 2.50 per cent.; contained added water.
q 13558	William Tomkins, Marlborough, . .	Total solids, 9.60 per cent.; fat, 2.80 per cent.; contained added water.
q 13559	William Tomkins, Marlborough, . .	Total solids, 9.84 per cent.; fat, 2.70 per cent.; contained added water.
q 13560	William Tomkins, Marlborough, . .	Total solids, 9.28 per cent.; fat, 2.70 per cent.; contained added water.
q 13561	William Tomkins, Marlborough, . .	Total solids, 9.40 per cent.; fat, 2.50 per cent.; contained added water.
q 13562	William Tomkins, Marlborough, . .	Total solids, 9.30 per cent.; fat, 2.70 per cent.; contained added water.
q 13563	William Tomkins, Marlborough, . .	Total solids, 10.20 per cent.; fat, 4.30 per cent.; contained added water.
24164	Harry N. Whitney, North Attleborough,	Total solids, 11.06 per cent.; fat, 3.20 per cent.; contained added water.
24165	Harry N. Whitney, North Attleborough,	Total solids, 10.20 per cent.; fat, 2.60 per cent.; contained added water.
24166	Harry N. Whitney, North Attleborough,	Total solids, 11.14 per cent.; fat, 3.20 per cent.; contained added water.
24167	Harry N. Whitney, North Attleborough,	Total solids, 10.78 per cent.; fat, 3.40 per cent.; contained added water.

QUARTERLY REPORT ON COLD STORAGE.

During the months of January, February and March, 1914, the cold-storage warehouses throughout the State were visited by the State inspectors. As a result of their inspections a number of articles were condemned, confiscated and destroyed on account of being decomposed, tainted or otherwise unfit for food, as shown below.

The following tables show the quantities of articles of food placed in cold storage during the three months preceding the first day of April, 1914; also, the quantities of butter and eggs held on the first day of April, 1914: —

ARTICLES PLACED IN COLD STORAGE.

ARTICLES.	Cases.	Dozens.	Packages.	Pounds.
Eggs, case,	8,338	250,140	–	–
Eggs, broken,	–	–	171	208,893
Butter,	–	–	23,467	1,709;854
Poultry,	74	–	6,987	4,909,636
Game,	23	233½	1,240	41,937
Meat, fresh,	954	–	4,081	4,325,822
Meat products, fresh (except in process of manufacture),	1,912	–	1,758	386,861
Fish, fresh food,	6	–	23	3,233,111
Totals,	11,307	250,373½	37,727	14,816,114

BUTTER AND EGGS HELD.

Eggs, case,	2,355	70,650	–	–
Eggs, broken,	–	–	128	4,154
Butter,	36,997	–	18,050	3,116,850
Totals,	39,352	70,650	18,178	3,121,004

ARTICLES IN COLD STORAGE CONDEMNED UPON PHYSICAL AND CHEMICAL EXAMINATIONS AS UNFIT FOR FOOD.

Date.	ARTICLES.	Weight (Pounds).	Reasons.	Dispositions.
April 1, 1914	Chickens,	127	Tainted	Rendered
April 3, 1914	Turkeys,	978	Decomposed	Rendered
April 3, 1914	Chickens,	82	Decomposed	Rendered
April 3, 1914	Miscellaneous fish,	200	Soiled and dried	Rendered
April 3, 1914	Mackerel,	336	Soiled and dried	Rendered
April 3, 1914	Chicken halibut,	30	Soiled and dried	Rendered
April 3, 1914	Miscellaneous fish,	707	Soiled and dried	Rendered

ARTICLES IN COLD STORAGE CONDEMNED UPON PHYSICAL AND CHEMICAL EXAMINATIONS AS UNFIT FOR FOOD — *Concluded.*

Date.	ARTICLES.	Weight (Pounds).	Reasons.	Dispositions.
April 3, 1914	Fowl, ...	88	Decomposed	Rendered
April 3, 1914	Fowl, ...	108	Decomposed	Rendered
April 3, 1914	Beef, ...	390	Decomposed	Rendered
April 6, 1914	Pork loins, . . .	403	Decomposed	Rendered
April 6, 1914	Guinea chickens, .	55	Decomposed	Rendered
April 11, 1914	Bear, ...	105	Decomposed	Rendered
April 11, 1914	Miscellaneous fowl and game, . . .	123	Decomposed	Rendered
April 11, 1914	Miscellaneous meat, .	212	Decomposed	Rendered
April 11, 1914	Lamb, ...	740	Decomposed	Rendered
April 11, 1914	Pork loins, . . .	100	Decomposed	Rendered
April 11, 1914	Beef loins, . . .	50	Soiled and dried	Rendered
April 11, 1914	Lamb, ...	50	Soiled and dried	Rendered
April 13, 1914	Frozen eggs, . .	20	Decomposed	Destroyed
April 13, 1914	Turkeys, ...	15	Decomposed	Incinerated
April 15, 1914	Turkeys, ...	400	Decomposed	Rendered
April 15, 1914	Turkeys, ...	48	Decomposed	Rendered
April 17, 1914	Beef tenderloins, . .	322	Decomposed	Rendered
April 18, 1914	Chickens, . . .	180	Decomposed	Rendered
April 18, 1914	Pork trimmings, . .	64	Decomposed	Rendered
April 21, 1914	Turkeys, ...	157	Decomposed	Rendered
April 21, 1914	Turkeys, ...	168	Decomposed	Rendered
April 21, 1914	Chickens, ...	40	Decomposed	Rendered
April 21, 1914	Culls (fowl, etc.), .	40	Decomposed	Rendered
April 22, 1914	Pigs' kidneys, . .	295	Decomposed	Rendered
April 22, 1914	Beef tails, ...	671	Decomposed	Rendered
April 22, 1914	Beef tails, ...	1,351	Decomposed	Rendered
April 24, 1914	Beef tenderloins, . .	273	Decomposed	Rendered
April 24, 1914	Broilers, ...	6	Soiled and dried	Rendered
April 24, 1914	Ducks, ...	3	Soiled and dried	Rendered
April 24, 1914	Mutton chops, . .	51	Soiled and dried	Rendered
April 24, 1914	Guinea chickens, .	3	Dried	Rendered
April 24, 1914	Deer, fore quarter, .	17	Soiled and dried	Rendered
April 24, 1914	Deer, loin, . . .	7	Soiled and dried	Rendered
April 24, 1914	Canned eggs, . .	24	Decomposed	Rendered
April 24, 1914	Pork trimmings, . .	27	Decomposed	Rendered
April 25, 1914	Chickens, ...	206	Decomposed	Rendered
April 29, 1914	Sweetbreads, . .	2½	Decomposed	Rendered
April 30, 1914	Beef, ...	539	Decomposed	Rendered
Total, .	. . . . . .	9,813½		

CHEMICAL EXAMINATIONS OF SAMPLES OF COLD-STORAGE GOODS.

ARTICLES.	Number found to be of Good Quality.	Number found to be Unfit for Food.	Total Number of Samples examined.
Beef, ...	–	1	1
Chickens, ...	6	–	6
Ducks, ...	6	1	7
Fowl, ...	5	7	12
Lamb, ...	–	1	1
Pork, ...	–	16	16
Turkeys, ...	1	14	15
Totals, ...	18	40	58

QUARTERLY REPORT ON THE BUSINESS OF SLAUGHTERING AND MEAT INSPECTION.

The quarterly report upon the work of slaughtering and meat inspection from Jan. 1, 1914, to March 31, 1914, inclusive, has been rendered to the State Board of Health by the inspectors of slaughtering in the various cities and towns throughout the Commonwealth. The result of these inspections may be found in the following tables showing the number and kinds of carcasses inspected, the condemnations of carcasses found unfit for food, the reasons for condemnation and the disposition of such carcasses.

Where a blank space appears it indicates the absence of a report having been rendered by the inspector of slaughtering for such city or town, or that an inspector of slaughtering has not been nominated by the local board of health, or has not been approved by the State Board of Health.

Quarterly Report on Slaughtering Inspection, Jan. 1–March 31, 1914.

Cities and Towns.	Number of Cattle.	Number of Calves.	Number of Hogs.	Number of Sheep.	Number of Condemnations.	Reasons for Condemnation.	Disposition of Carcasses.
Abington, ...	3	52	129	–	– –	– –	– –
Acton, ...	666	974	61	4	21 cattle, 42 calves, 5 hogs	15 tuberculosis, 3 milk fever, 2 cancer, 1 tumor, 42 immature, 5 hog cholera	26 rendered, 39 fed to hogs, 3 fed to hogs and hens
Acushnet, ...	10	40	113	–	– –	– –	– –
Adams, ...	39	137	–	–	2 calves	2 immature	2 rendered
Agawam, ...	–	–	–	–	– –	– –	– –
Alford, ...	–	1	6	3	– –	– –	– –
Amesbury, ...	7	29	50	–	– –	– –	– –
Amherst, ...	163	236	156	20	7 cattle, 12 calves, 13 hogs	20 tuberculosis, 12 immature	17 rendered, 15 buried
Andover, ...	3	7	98	–	1 hog	1 tumor	1 rendered
Arlington, ...	–	668	–	–	9 calves	9 immature	9 rendered

Ashburnham,	4	9	23	3	–	–	–
Ashby,	90	243	86	4	4 cattle, 1 calf	4 tuberculosis, 1 anæmia	5 rendered
Ashfield,	51	6	47	1	1 cow	1 tuberculosis	1 rendered
Ashland,	2	6	120	–	2 cattle, 3 calves, 12 hogs	14 tuberculosis, 3 immature	17 rendered
Athol,	42	25	69	1	1 hog	1 hog cholera	1 rendered
Attleborough,	67	62	161	1	1 cow, 3 hogs	2 tuberculosis, 1 hog cholera, 1 sexual odor	4 buried
Auburn,	29	37	53	2	3 cattle	3 tuberculosis	3 rendered
Avon,	–	–	–	–	–	–	–
Ayer,	1	–	–	–	–	–	–
Barnstable,	5	11	82	–	–	–	–
Barre,	16	2	37	1	1 cow	1 tuberculosis	1 buried
Becket,	5	1	32	1	–	–	–
Bedford,	–	–	–	–	–	–	–
Belchertown,	20	53	131	–	1 cow	1 tuberculosis	1 buried
Bellingham,	–	–	12	–	–	–	–
Belmont,	–	–	–	–	–	–	–
Berkley,	–	–	–	–	–	–	–
Berlin,	2	1	16	3	–	–	–
Bernardston,	–	–	–	–	–	–	–
BEVERLY,	–	–	–	–	–	–	–
Billerica,	5	55	60	–	1 cow, 5 calves, 1 hog	2 tuberculosis, 5 immature	7 rendered
Blackstone,	–	–	–	–	–	–	–
Blandford,	2	–	5	–	–	–	–
Bolton,	–	–	8	–	–	–	–
Bourne,	2	2	24	–	–	–	–
Boxborough,	–	–	–	–	–	–	–
Boxford,	24	72	50	–	–	–	–
Boylston,	14	59	24	–	–	–	–
Braintree,	7	81	88	–	–	–	–
Brewster,	2	5	5	–	–	–	–
Bridgewater,	–	–	56	–	–	–	–
Brimfield,	1	5	13	–	–	–	–
Brockton,	5	1	13	–	1 cow, 1 hog	1 paralysis, 1 pneumonia	2 rendered
Brookfield,	2	4	19	–	–	–	–
Brookline,	–	–	–	–	–	–	–
Buckland,	7	–	27	1	–	–	–
Burlington,	–	–	–	–	–	–	–

QUARTERLY REPORT ON SLAUGHTERING INSPECTION, JAN. 1–MARCH 31, 1914 — *Continued.*

CITIES AND TOWNS.	Number of Cattle.	Number of Calves.	Number of Hogs.	Number of Sheep.	Number of Condemnations.	Reasons for Condemnation.	Disposition of Carcasses.
CAMBRIDGE,	–	5,596	–	–	181 calves	167 immature, 9 enteritis, 5 jaundice	181 rendered
Canton,	–	–	21	–	– –	– –	– –
Carlisle,	38	41	1	–	– –	– –	– –
Carver,	1	11	7	–	– –	– –	– –
Charlemont,	24	2	49	7	– –	– –	– –
Charlton,	98	194	36	2	1 cow, 1 hog	2 tuberculosis	2 buried
Chatham,	2	–	24	–	– –	– –	– –
Chelmsford,	120	98	188	2	5 cattle, 3 calves, 3 hogs	3 tuberculosis, 1 emaciation, 1 dead on arrival, 3 immature, 3 hog cholera	8 rendered, 3 fed to hogs
CHELSEA,	–	–	–	–	– –	– –	– –
Cheshire,	19	14	8	–	– –	– –	– –
Chester,	11	17	22	–	1 cow	1 tuberculosis	1 buried
Chesterfield,	19	7	50	–	– –	– –	– –
CHICOPEE,	4	10	92	–	– –	– –	– –
Chilmark,	–	–	5	–	– –	– –	– –
Clarksburg,	4	12	38	–	– –	– –	– –
Clinton,	18	115	116	–	1 cow, 2 calves, 1 hog	1 tuberculosis, 2 immature, 1 peritonitis	4 rendered
Cohasset,	1	2	35	–	– –	– –	– –
Colrain,	33	–	56	–	– –	– –	– –
Concord,	–	–	5	–	– –	– –	– –
Conway,	–	–	–	–	– –	– –	– –
Cummington,	10	22	60	1	– –	– –	– –
Dalton,	21	18	44	9	– –	– –	– –
Dana,	4	3	10	–	– –	– –	– –
Danvers,	–	100	–	–	– –	– –	– –
Dartmouth,	10	127	173	–	10 calves	10 immature	10 rendered
Dedham,	3	118	258	–	1 calf, 20 hogs	1 immature, 19 hog cholera, 1 pneumonia	21 rendered
Deerfield,	15	3	79	1	– –	– –	– –
Dennis,	3	5	28	–	– –	– –	– –

Dighton,	105	133	47	1	– –	– –	– –
Douglas,	1	15	17	–	– –	– –	– –
Dover,	–	–	30	–	– –	– –	– –
Dracut,	366	305	376	–	7 cattle, 15 calves, 8 hogs	7 tuberculosis, 15 immature, 7 hog cholera, 1 measles	30 rendered
Dudley,	34	35	66	–	2 cattle	2 tuberculosis	1 rendered, 1 buried
Dunstable,	–	–	20	–	– –	– –	– –
Duxbury,	1	–	84	–	– –	– –	– –
East Bridgewater,	2	125	38	–	– –	– –	– –
East Longmeadow,	5	7	52	–	1 cow	1 difficult parturition	1 rendered
Eastham,	3	2	7	–	– –	– –	– –
Easthampton,	12	117	59	–	1 cow	1 tuberculosis	1 rendered
Easton,	16	111	21	–	– –	– –	– –
Edgartown,	1	25	62	27	– –	– –	– –
Egremont,	12	–	85	4	– –	– –	– –
Enfield,	3	120	28	–	– –	– –	– –
Erving,	6	4	17	–	– –	– –	– –
Essex,	–	–	–	–	– –	– –	– –
EVERETT,	–	–	–	–	– –	– –	– –
Fairhaven,	282	283	10	–	12 cattle, 17 calves, 1 hog	9 tuberculosis, 3 septicæmia, 1 hydræmia, 17 immature	30 rendered
FALL RIVER,	–	–	–	–	– –	– –	– –
Falmouth,	–	–	–	–	– –	– –	– –
FITCHBURG,	215	379	111	62	2 cattle	2 tuberculosis	2 rendered
Florida,	4	–	5	–	– –	– –	– –
Foxborough,	3	4	26	–	– –	– –	– –
Framingham,[1]	–	–	–	–	– –	– –	– –
Franklin,	–	6	127	–	– –	– –	– –
Freetown,	4	4	18	–	– –	– –	– –
Gardner,	–	–	–	–	– –	– –	– –
Gay Head,	–	–	–	–	– –	– –	– –
Georgetown,	–	4	17	–	– –	– –	– –
Gill,	18	17	47	–	– –	– –	– –
GLOUCESTER,	4	57	32	–	1 cow, 4 calves	1 tuberculosis, 4 immature	5 rendered

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[1] Received too late to classify.

Quarterly Report on Slaughtering Inspection, Jan. 1–March 31, 1914 — *Continued.*

Cities and Towns.	Number of Cattle.	Number of Calves.	Number of Hogs.	Number of Sheep.	Number of Condemnations.	Reasons for Condemnation.	Disposition of Carcasses.
Goshen,	9	1	5	–	– –	– –	– –
Gosnold,	–	–	–	–	– –	– –	– –
Grafton,	2	29	110	–	1 hog	1 hog cholera	1 rendered
Granby,	183	272	106	8	3 cattle	2 tuberculosis, 1 difficult parturition	2 buried, 1 rendered
Granville,	4	12	44	5	– –	– –	– –
Great Barrington,	26	14	68	–	10 cattle	10 tuberculosis	10 rendered
Greenfield,	34	66	80	169	3 cattle, 5 hogs	3 tuberculosis, 4 hog cholera, 1 trichina	8 rendered
Greenwich,	9	17	35	–	– –	– –	– –
Groton,	–	2	64	–	– –	– –	– –
Groveland,	1	2	23	5	– –	– –	– –
Hadley,	–	–	25	–	– –	– –	– –
Halifax,	3	–	2	–	– –	– –	– –
Hamilton,	–	–	–	–	– –	– –	– –
Hampden,	3	35	18	–	– –	– –	– –
Hancock,	2	14	–	–	– –	– –	– –
Hanover,	–	6	14	–	– –	– –	– –
Hanson,	–	4	29	–	– –	– –	– –
Hardwick,	1	–	5	–	– –	– –	– –
Harvard,	13	105	33	2	1 calf	1 immature	1 rendered
Harwich,	8	9	3	–	– –	– –	– –
Hatfield,	30	64	87	–	– –	– –	–
HAVERHILL,	–	–	–	–	– –	– –	– –
Hawley,	3	–	7	–	– –	– –	– –
Heath,	6	–	15	–	– –	– –	– –
Hingham,	3	2	83	–	– –	– –	– –
Hinsdale,	13	9	14	–	1 cow	1 tuberculosis	1 rendered
Holbrook,	–	–	–	–	– –	– –	– –
Holden,	16	66	15	–	1 hog	1 lacerated wounds	1 rendered
Holland,	–	–	–	–	– –	– –	– –
Holliston,	28	39	74	–	– –	– –	– –
HOLYOKE,	–	3	11	–	1 hog	1 tuberculosis	1 rendered
Hopedale,	–	–	–	–	– –	– –	– –

Hopkinton,	–	2	31	–	– –	– –	– –
Hubbardston,	5	34	27	–	2 cattle	2 tuberculosis	2 burned
Hudson,	–	3	34	–	– –	– –	– –
Hull,	–	–	–	–	– –	– –	– –
Huntington,	3	2	28	–	– –	– –	– –
Ipswich,	7	1	50	–	– –	– –	– –
Kingston,	–	1	11	–	– –	– –	– –
Lakeville,	–	1	18	–	– –	– –	– –
Lancaster,	–	–	51	–	– –	– –	– –
Lanesborough,	–	–	–	–	– –	– –	– –
LAWRENCE,	54	–	90	–	1 cow, 3 hogs	4 tuberculosis	4 rendered
Lee,	25	29	57	–	1 cow	1 tuberculosis	1 buried
Leicester,	10	105	34	6	– –	– –	– –
Lenox,	101	17	42	19	5 cattle	5 tuberculosis	5 buried
Leominster,	50	104	105	–	3 cattle, 3 calves, 1 hog	4 tuberculosis, 3 immature	7 rendered
Leverett,	12	4	54	–	– –	– –	– –
Lexington,	21	876	346	–	33 calves	8 immature, 25 bruised	33 rendered
Leyden,	12	6	14	–	– –	– –	– –
Lincoln,	–	–	–	–	– –	– –	– –
Littleton,	–	–	–	–	– –	– –	– –
Longmeadow,	–	2	11	–	– –	– –	– –
LOWELL,	–	–	89	–	1 hog	1 tuberculosis	1 rendered
Ludlow,	4	109	7	–	– –	– –	– –
Lunenburg,	85	158	125	–	2 cattle, 1 hog	2 tuberculosis, 1 pneumonia	3 rendered
LYNN,	172	82	72	–	9 calves, 2 hogs	8 immature, 3 tuberculosis	11 rendered
Lynnfield,	295	138	99	32	4 cattle, 5 calves, 3 hogs	4 tuberculosis, 5 immature, 3 hog cholera	12 rendered
MALDEN,	–	–	–	–	– –	– –	– –
Manchester,	–	–	–	–	– –	– –	– –
Mansfield,	12	11	165	–	2 cattle, 1 hog	3 tuberculosis	3 rendered
Marblehead,	–	–	3	–	– –	– –	– –
Marion,	–	–	55	–	– –	– –	– –
MARLBOROUGH,	6	38	89	–	1 cow, 5 hogs	1 difficult parturition, 5 tuberculosis	1 fed to hogs, 4 rendered, 1 buried

QUARTERLY REPORT ON SLAUGHTERING INSPECTION, JAN. 1–MARCH 31, 1914 — *Continued.*

CITIES AND TOWNS.	Number of Cattle.	Number of Calves.	Number of Hogs.	Number of Sheep.	Number of Condemnations.	Reasons for Condemnation.	Disposition of Carcasses.
Marshfield.	3	1	15	–	– –	– –	– –
Mashpee,	–	–	–	–	– –	– –	– –
Mattapoisett,	–	–	62	–	– –	– –	– –
Maynard,	19	77	115	4	– –	– –	– –
Medfield,	–	–	66	–	– –	– –	– –
MEDFORD,	–	–	–	–	– –	– –	– –
Medway,	61	253	43	–	1 cow	1 tuberculosis	1 rendered
MELROSE,	–	–	–	–	– –	– –	– –
Mendon,	–	2	1	–	– –	– –	– –
Merrimac,	1	1	34	–	– –	– –	– –
Methuen,	114	44	79	2	$3\frac{1}{4}$ cattle	$3\frac{1}{4}$ tuberculosis	$3\frac{1}{4}$ rendered
Middleborough,	57	50	82	1	3 cattle	3 tuberculosis	3 rendered
Middlefield,	4	–	6	–	1 cow	1 tuberculosis	1 burned
Middleton,	–	–	11	–	– –	– –	– –
Milford,	70	116	185	–	1 cow, 7 calves	1 tuberculosis, 7 immature	3 rendered, 5 buried
Millbury,	–	–	–	–	– –	– –	– –
Millis,	22	27	–	–	– –	– –	– –
Milton,	–	–	11	15	– –	– –	– –
Monroe,	–	–	–	–	– –	– –	– –
Monson,	20	39	42	–	1 hog	1 tuberculosis	1 buried
Montague,	8	21	35	8	– –	– –	– –
Monterey,	24	26	81	–	– –	– –	– –
Montgomery,	–	11	6	–	– –	– –	– –
Mount Washington,	–	–	–	–	– –	– –	– –
Nahant,	–	–	–	–	– –	– –	– –
Nantucket,	1	10	48	–	– –	– –	– –
Natick,	–	–	–	–	– –	– –	– –
Needham,	–	–	–	–	– –	– –	– –
New Ashford,	–	1	3	1	– –	– –	– –
NEW BEDFORD,	86	96	161	–	8 cattle, 4 calves, 1 hog	8 tuberculosis, 4 immature, 1 rheumatic arthritis	13 rendered
New Braintree,	7	126	8	–	– –	– –	– –
New Marlborough,	12	–	4	–	– –	– –	– –

New Salem,	13	16	49	–	– –	– –	– –
Newbury,	15	162	46	1	16 calves, 2 hogs	16 immature, 2 hog cholera	16 fed to dogs and hens, 2 rendered
NEWBURYPORT,	90	115	151	5	1 cow, 1 calf	1 tuberculosis, 1 immature	2 rendered
NEWTON,	–	–	–	–	– –	– –	– –
Norfolk,	–	–	–	–	– –	– –	– –
NORTH ADAMS,	198	176	93	1	2 cattle, 2 calves	2 tuberculosis, 2 immature	4 rendered
North Andover,	2	2	28	–	1 hog	1 tuberculosis	1 rendered
North Attleborough,	67	99	139	–	2 cattle	1 tuberculosis, 1 emaciation	2 rendered
North Brookfield,	4	6	41	–	1 cow, 1 hog	2 tuberculosis	2 buried
North Reading,	–	–	57	–	– –	– –	– –
NORTHAMPTON,	38	83	74	–	1 cow	1 tuberculosis	1 rendered
Northborough,	3	7	15	6	1 cow	1 tuberculosis	1 rendered
Northbridge,	–	3	–	–	– –	– –	– –
Northfield,	15	5	71	–	– –	– –	– –
Norton,	–	–	20	–	– –	– –	– –
Norwell,	3	6	124	–	1 hog	1 tuberculosis	1 buried
Norwood,	–	–	–	–	– –	– –	– –
Oak Bluffs,	–	–	–	–	– –	– –	– –
Oakham,	2	16	1	–	– –	– –	– –
Orange,	36	33	85	–	5 cattle, 1 hog	6 tuberculosis	5 rendered, 1 buried
Orleans,	10	2	17	–	1 hog	1 emaciation	1 rendered
Otis,	5	9	9	2	– –	– –	– –
Oxford,	–	1	2	–	– –	– –	– –
Palmer,	87	33	56	–	4 cattle	4 tuberculosis	4 rendered
Paxton,	5	39	2	–	– –	– –	– –
Peabody,	198	370	397	1	1 cow, 8 calves, 8 hogs	2 tuberculosis, 8 immature, 6 hog cholera, 1 urticaria	17 rendered
Pelham,	1	–	7	–	– –	– –	– –
Pembroke,	3	9	19	–	1 cow	1 tuberculosis	1 buried
Pepperell,	20	98	289	–	2 cattle, 1 calf	2 tuberculosis, 1 immature	3 rendered
Peru,	–	–	–	–	– –	– –	– –
Petersham,	–	–	–	–	– –	– –	– –
Phillipston,	3	5	10	–	– –	– –	– –

Quarterly Report on Slaughtering Inspection, Jan. 1–March 31, 1914 — *Continued.*

Cities and Towns.	Number of Cattle.	Number of Calves.	Number of Hogs.	Number of Sheep.	Number of Condemnations.	Reasons for Condemnation.	Disposition of Carcasses.
Pittsfield,	130	125	97	24	1 cow	1 tuberculosis	1 buried
Plainfield,	10	15	30	1	– –	– –	– –
Plainville,	–	–	5	–	– –	– –	– –
Plymouth,	46	7	69	–	2 cattle, 1 hog	2 tuberculosis, 1 exhaustion	3 rendered
Plympton,	1	–	7	–	– –	– –	– –
Prescott,	2	–	2	–	– –	– –	– –
Princeton,	5	33	23	2	– –	– –	– –
Provincetown,	3	–	15	–	– –	– –	– –
Quincy,	–	–	5	–	– –	– –	– –
Randolph,	–	–	25	–	– –	– –	– –
Raynham,	3	14	7	–	– –	– –	– –
Reading,	187	85	62	–	2 cattle, 3 calves	2 tuberculosis, 3 immature	5 rendered
Rehoboth,	91	331	69	–	2 cattle	2 tuberculosis	1 rendered, 1 buried
Revere,	–	–	–	–	– –	– –	– –
Richmond,	20	9	42	30	– –	– –	– –
Rochester,	9	110	79	–	– –	– –	– –
Rockland,	–	–	–	–	– –	– –	– –
Rockport,	1	23	12	–	– –	– –	– –
Rowe,	10	1	10	2	– –	– –	– –
Rowley,	15	89	44	–	1 cow	1 tuberculosis	1 rendered
Royalston,	5	7	44	–	– –	– –	– –
Russell,	1	7	8	–	1 hog	1 septicæmia	1 buried
Rutland,	6	66	64	–	– –	– –	– –
Salem,	–	–	–	–	– –	– –	– –
Salisbury,	1	–	38	–	– –	– –	– –
Sandisfield,	34	11	14	–	– –	– –	– –
Sandwich,	4	–	25	–	– –	– –	– –
Saugus,	13	255	27	–	3 cattle, 29 calves	3 tuberculosis, 27 immature, 2 septicæmia	32 rendered

Savoy,	–	–	–	–	–	–	–
Scituate,	2	2	7	–	–	–	–
Seekonk,	–	2	128	–	–	–	–
Sharon,	–	1	17	–	–	–	–
Sheffield,	34	10	156	10	–	–	–
Shelburne,	53	18	91	28	2 cattle, 1 hog	2 tuberculosis, 1 cirrhosis	3 rendered
Sherborn,[1]	–	–	–	–	–	–	–
Shirley,	3	–	28	–	–	–	–
Shrewsbury,	17	200	64	1	4 cattle	4 tuberculosis	4 rendered
Shutesbury,	1	1	14	–	–	–	–
Somerset,	24	9	73	–	–	–	–
SOMERVILLE,	–	–	–	–	–	–	–
South Hadley,	16	232	88	–	1 calf	1 bruised	1 rendered
Southampton,	58	54	81	1	1 cow, 2 calves	1 tuberculosis, 2 immature	1 burned, 2 fed to hogs
Southborough,	–	–	–	–	–	–	–
Southbridge,	29	26	33	–	–	–	–
Southwick,	12	22	72	–	–	–	–
Spencer,	6	17	24	3	–	–	–
SPRINGFIELD,	–	138	45	–	3 calves	3 immature	3 rendered
Sterling,	–	–	–	–	–	–	–
Stockbridge,	–	–	–	–	–	–	–
Stoneham,	–	–	80	–	1 hog	1 tuberculosis	1 rendered
Stoughton,	5	47	20	–	–	–	–
Stow,	–	–	–	–	–	–	–
Sturbridge,	123	264	34	2	–	–	–
Sudbury,	–	–	9	–	–	–	–
Sunderland,[1]	–	–	–	–	–	–	–
Sutton,	3	95	12	–	–	–	–
Swampscott,	–	–	–	–	–	–	–
Swansea,	104	45	86	18	1 cow	1 tuberculosis	1 rendered
TAUNTON,	98	49	265	–	1 cow	1 tuberculosis	1 rendered
Templeton,	9	28	38	–	–	–	–
Tewksbury,	96	144	78	–	1 cow, 7 calves	1 tuberculosis, 7 immature	1 rendered, 7 fed to hens
Tisbury,	–	–	–	–	–	–	–
Tolland,	10	–	18	–	–	–	–

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[1] Received too late to classify.

QUARTERLY REPORT ON SLAUGHTERING INSPECTION, JAN. 1–MARCH 31, 1914 — *Concluded.*

CITIES AND TOWNS.	Number of Cattle.	Number of Calves.	Number of Hogs.	Number of Sheep.	Number of Condemnations.	Reasons for Condemnation.	Disposition of Carcasses.
Topsfield,	3	15	56	699	2 calves	2 immature	2 rendered
Townsend,	14	13	66	–	1 cow, 1 hog	2 tuberculosis	2 rendered
Truro,	5	–	28	–	– –	– –	– –
Tyngsborough,	–	–	16	–	– –	– –	– –
Tyringham,	7	2	14	–	– –	– –	– –
Upton,	2	8	29	–	– –	– –	– –
Uxbridge,	17	6	23	–	3 cattle, 1 hog	4 tuberculosis	4 rendered
Wakefield,	–	–	87	–	– –	– –	– –
Wales,	–	–	–	–	– –	– –	– –
Walpole,	1	–	194	1	4 hogs	3 tuberculosis, 1 tumor	3 buried, 1 rendered
WALTHAM,	–	–	35	–	– –	– –	– –
Ware,	4	6	68	–	– –	– –	– –
Wareham,	1	4	94	–	– –	– –	– –
Warren,	9	27	29	–	– –	– –	– –
Warwick,	2	3	31	–	– –	– –	– –
Washington,	1	16	20	–	– –	– –	– –
Watertown,	–	–	–	–	– –	– –	– –
Wayland,	1	4	15	–	– –	– –	– –
Webster,	–	–	–	–	– –	– –	– –
Wellesley,	–	–	–	–	– –	– –	– –
Wellfleet,	12	1	11	–	– –	– –	– –
Wendell,	7	5	9	–	– –	– –	– –
Wenham,	–	–	–	–	– –	– –	– –
West Boylston,	–	3	25	–	– –	– –	– –
West Bridgewater,	2	127	132	–	5 calves, 1 hog	5 immature, 1 tuberculosis	6 rendered
West Brookfield,	7	18	38	–	– –	– –	– –
West Newbury,	9	2	16	–	– –	– –	– –
West Springfield,	–	–	–	–	– –	– –	– –
West Stockbridge,	7	5	19	–	– –	– –	– –
West Tisbury,	1	2	2	17	– –	– –	– –
Westborough,	1	5	13	–	1 cow	1 tuberculosis	1 rendered
Westfield,	–	–	–	–	– –	– –	– –

Westford,	16	133	152	–	2 cattle, 1 calf, 8 hogs	2 tuberculosis, 1 immature, 8 hog cholera	11 rendered
Westhampton,	16	31	42	–	1 cow	1 tuberculosis	1 buried
Westminster,	1	2	3	1	– –	– –	– –
Weston,	33	193	65	–	2 cattle, 23 calves, 2 hogs	2 tuberculosis, 23 immature, 2 measles	9 rendered, 18 buried
Westport,	240	212	349	2	2 cattle, 2 calves, 2 hogs	4 tuberculosis, 2 immature	4 rendered, 2 burned
Westwood,	–	–	–	–	– –	– –	– –
Weymouth,	–	34	89	9	– –	– –	– –
Whately,	14	–	25	–	– –	– –	– –
Whitman,	–	–	–	–	– –	– –	– –
Wilbraham,	18	22	49	–	1 cow, 1 calf, 3 hogs	4 tuberculosis, 1 immature	4 rendered, 1 fed to hens
Williamsburg,	13	16	32	–	– –	– –	– –
Williamstown,	25	159	147	99	1 cow	1 abscesses	1 buried
Wilmington,	8	84	179	–	1 calf, 6 hogs	1 immature, 6 hog cholera	7 rendered
Winchendon,	9	29	66	–	1 calf, 3 hogs	2 tuberculosis, 1 septicæmia, 1 inspector not present	2 buried, 2 rendered
Winchester,	–	–	–	–	– –	– –	– –
Windsor,	12	26	8	4	1 cow	1 tuberculosis	1 buried
Winthrop,	–	–	–	–	– –	– –	– –
WOBURN,	–	19	1,641	–	3 calves, 12 hogs	3 immature, 3 lacerated wounds, 2 tuberculosis, 7 enteritis	15 rendered
WORCESTER,	731	497	283	13	12 cattle, 14 calves	12 tuberculosis, 14 immature	26 rendered
Worthington,	6	5	43	5	– –	– –	– –
Wrentham,	–	1	38	–	– –	– –	– –
Yarmouth,	–	–	25	–	– –	– –	– –

SUMMARY.

Total number of carcasses inspected,			46,547
(*a*) Cattle,	8,004		
(*b*) Calves,	20,169		
(*c*) Hogs,	16,948		
(*d*) Sheep,	1,426		
Total number of carcasses passed,			45,690¾
Total number of carcasses condemned,			856¼
(*a*) Cattle,	201¼		
(*b*) Calves,	495		
(*c*) Hogs,	160		
Reasons for condemnation: —			
(*a*) Tuberculosis,		249¼	
Cattle,	183¼		
Calves,	2		
Hogs,	64		
(*b*) Immature,		450	
Calves,	450		
(*c*) Hog cholera,		66	
Hogs,	66		
(*d*) Septicæmia,		7	
Cattle,	3		
Calves,	2		
Hogs,	2		
(*e*) Peritonitis,		1	
Hog,	1		
(*f*) Enteritis,		16	
Calves,	9		
Hogs,	7		
(*g*) Cirrhosis,		1	
Hog,	1		
(*h*) Rheumatic arthritis,		1	
Hog,	1		
(*i*) Pneumonia,		3	
Hogs,	3		
(*j*) Urticaria,		1	
Hog,	1		
(*k*) Paralysis,		1	
Cow,	1		

Reasons for condemnation — *Concluded.*			
(*l*) Jaundice,		5	
Calves,	5		
(*m*) Emaciation,		3	
Cattle,	2		
Hog,	1		
(*n*) Anæmia,		1	
Calf,	1		
(*o*) Trichina,		1	
Hog,	1		
(*p*) Hydræmia,		1	
Cow,	1		
(*q*) Cancer,		2	
Cattle,	2		
(*r*) Tumor,		3	
Cow,	1		
Hogs,	2		
(*s*) Measles,		3	
Hogs,	3		
(*t*) Milk fever,		3	
Cattle,	3		
(*u*) Abscesses,		1	
Cow,	1		
(*v*) Difficult parturition,		3	
Cattle,	3		
(*w*) Lacerated wounds,		4	
Hogs,	4		
(*x*) Bruised,		26	
Calves,	26		
(*y*) Exhaustion,		1	
Hog,	1		
(*z*) Sexual odor,		1	
Hog,	1		
(*aa*) Dead on arrival,		1	
Cow,	1		
(*bb*) Inspector not present,		1	
Hog,	1		
Total number of reasons for condemnation,			28

Disposition of condemned carcasses: —

(*a*) Rendered,		704¼
Cattle,	170¼	
Calves,	394	
Hogs,	140	
(*b*) Buried,		74
Cattle,	26	
Calves,	28	
Hogs,	20	
(*c*) Burned,		6
Cattle,	4	
Calves,	2	
(*d*) Fed to hogs,		45
Cow,	1	
Calves,	44	
(*e*) Fed to hens,		8
Calves,	8	

Disposition of condemned carcasses — *Concluded.*

(*f*) Fed to hogs and hens,		3
Calves,	3	
(*g*) Fed to dogs and hens,		16
Calves,	16	
Total number of dispositions of carcasses,		7

The following cities and towns reporting upon the work of inspection rendered "Nothing to report": —

Boxborough,
Brookline,
Burlington,
Everett,
Fall River,
Holbrook,
Malden,
Manchester,
Medford,
Natick,
Newton,
Salem,
Somerville,
Southborough,
Stow,
Whitman,
Winthrop.

During the month of April, 1914, Albert E. Davis of Westport was convicted of slaughtering without the inspector being present at the time of slaughter and was fined $10.

REPORT ON INSPECTION OF DAIRIES.

During the month of April, 1914, 256 dairies were examined in the following places: —

Place.	Number examined.	Class AA.	Class A.	Class B.	Unclean Dairies.	Per Cent. Clean Dairies.
Barnstable,	22	1	2	12	7	68.18
Bourne,	5	–	–	2	3	40.00
Chilmark,	1	–	–	1	–	100.00
Dartmouth,	1	–	–	1	–	100.00
Dover,	15	1	1	7	6	60.00
Edgartown,	8	–	1	3	4	50.00
Falmouth,	11	–	2	7	2	81.82
Hanover,	19	–	–	3	16	15.79
Ipswich,	34	1	1	8	24	29.41
Kingston,	19	–	1	11	7	63.16
Marblehead,	21	–	1	8	12	42.86
Marshfield,	17	–	3	8	6	64.71
Nantucket,	40	–	2	15	23	42.50
Oak Bluffs,	6	–	–	2	4	33.33
Rockport,	17	–	–	2	15	11.76
Sandwich,	9	–	1	3	5	44.44
Tisbury,	3	–	–	2	1	66.67
West Tisbury,	5	–	–	3	2	60.00
Westborough,	1	–	–	1	–	100.00
Yarmouth,	2	–	–	1	1	50.00

Total number of dairies examined,	256
Total number of commendable dairies,	118
Total number of unclean dairies,	138
Percentage of dairies which passed inspection,	46.09

In addition to the above, 65 dairies were visited at which the sale of milk had been discontinued; also, 25 dairies were reported as producing less than 20 quarts of milk a day.

Included in the total number of dairies visited were 51 which had recently started in the milk-producing business and were inspected for the first time.

The names of the owners of the dairies found to be worthy of commendation follow: —

BARNSTABLE.

Class AA.

	Per Cent.
Everett, Henry C.,	91

Class A.

	Per Cent.		Per Cent.
Evans, Edward H.,	77½	Linnell, F. H.,	75

Class B.

	Per Cent.
Bacon, Robert,	72½
Bursley, John,	64½
Codd, Warren,	60
Crocker, B. S.,	72
Crosby, Aaron S.,	64½
Gifford, Charles,	69½
Jenkins, Harry W.,	66
Kleinschmidt, Louis,	60½
Lawrence, Andrew,	60
Marchant, Charles B.,	62½
Marston, Howard,	73
Mecarta, (Mrs.) Betsey,	64

BOURNE.

Class B.

Burgess, A. W.,	65½
MacDonald, J. W.,	65

CHILMARK.

Class B.

	Per Cent.
Adams, J. F.,	64½

DARTMOUTH.

Class B.

Corey, Joseph,	61½

DOVER.

Class AA.

Porter, (Dr.) W. T.,	94¾

Class A.

Pierce, Charles C.,	76

Class B.

Bond, R. H.,	63½
Brown, John H.,	61½
Comiskey, M. W.,	64
Hanchette, Homer,	62
Post, J. H.,	68½
Rice, H. L.,	72½
Schaffner, J. V.,	61

EDGARTOWN.

Class A.

Dutton, C. E.,	77

Class B.

Cleveland, Asa L.,	66½
Cleveland, Henry J.,	60
Vincent, W. G.,	62½

FALMOUTH.

Class A.

	Per Cent.
Murphy, Timothy,	86½
Perry & Ferreira,	82

Class B.

Avery, J. W.,	60
Crowell, A. F.,	60½
Donaldson, John F.,	62
Gifford, A. J.,	66
Lawrence, Herbert H.,	68½
Nye, Charles J.,	62
White, Manuel,	70

HANOVER.

Class B.

Donnell, Reuben C.,	64
Sturtevant & Osburn,	68½
Ford, B. & C. W.,	61½

IPSWICH.

Class AA.

	Per Cent.
Fraser, F. P.,	94

Class A.

Appleton, James W.,	78

Class B.

Appleton, F. R.,	71
Brown, Storey,	62½
Goodhue, William,	61
Harris, Ned,	62½
Jewett, Charles,	61
Perley, Osborne P.,	60½
Spyut, Albin,	63
Stanford, C. D.,	66

KINGSTON.

Class A.

Holmes, (Miss) Helen,	83½

Class B.

Bailey, Ellsworth C.,	64
Chandler, O. B.,	61½
Delano, Paul H.,	62½
Holmes, (Dr.) A. B.,	65
Holmes, Horace,	74½
Keene, Francis W.,	63
MacDonald, J. C.,	64½
Quinn, John,	66
Reidenbach, Jacob,	64½
Shattuck, J. F.,	60½
Siebenscher, W. R.,	62

MARBLEHEAD.

Class A.

Hathaway, (Miss) E. B.,	79

Class B.

	Per Cent.		Per Cent.
Allenspach, John,	66	Kowalski, Joseph,	62½
Carey, John H.,	60	Martin, B. F., Sons,	64¼
Dickinson, (Mrs.) D. P.,	62	Rose, Mary H.,	62½
Higgins, Richard,	61	Thrasher, Philip,	64

MARHSFIELD.

Class A.

Nelson, H. W.,	87	Thomas, Hartley L.,	78
Sears, (Mrs.) George,	76		

Class B.

Bryant, Bradley S.,	74	Otis, Mrs.,	70
Collins, Lindley,	64	Peterson, Irving,	62
Estes, E. E.,	61	Strange, D. T.,	67
Osborne, Augustus,	68½	Williamson, Charles H.,	66½

NANTUCKET.

Class A.

Crosby, (Miss) Mary E.,	80	Grouard, (Dr.) J. S.,	81½

Class B.

Bartlett, John H.,	64	Holm, Frank E.,	67
Brooks, Richard,	61	Hussey, Oliver Clinton,	66
Cabot, W. Channing,	68½	Maglathlin, F. B.,	61
Chadwick, Frank P.,	60	Marks, C. L.,	62½
Dawson, Walter,	65½	Morey, E. C.,	60
Dunham, Harry,	66½	Roberts, John E., 2d,	60
Fish, Fred S.,	73½	Swain, (Mrs.) W. T.,	67
Gardner, Wallace,	70½		

OAK BLUFFS.

Class B.

Chase, Frank W.,	67	DeBettencourt, W. S.,	61

ROCKPORT.

Class B.

French, Albert,	69½	Nugent, Charles,	66

SANDWICH.

Class A.

	Per Cent.
Parker, George,	76½

Class B.

	Per Cent.		Per Cent.
Armstrong, R. F.,	74	Tulas, Herman,	60½
Holway, H. P.,	71½		

TISBURY.

Class B.

Look, Samuel (Estate),	68½	Norton, F. W.,	62½

WEST TISBURY.

Class B.

Look, Orin W.,	62	Strater, T. G.,	71¼
Luce, George Hunt,	60½		

WESTBOROUGH.

Class B.

	Per Cent.
Kazarian, M.,	62

YARMOUTH.

Class B.

Gorham, (Mrs.) Mary E.,	61½

CLASSIFICATION OF DAIRIES.

AA — 90 to 100 per cent.
A — 75 to 90 per cent.
B — 60 to 75 per cent.
Below Class B (60 per cent.), unclean or dirty.

AN ECONOMIC VIEW OF VENEREAL INFECTIONS.[1]

JAMES PATTERSON, M.D., CHICAGO.

There is no subject of more vital importance than that of venereal infections and means of combatting them. We have come to a point where such freedom of discussion is possible as was unthought of a few years ago, and is it not now advisable to add some more definite straightforward action in ridding mankind of these avoidable infections?

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[1] Reprinted from The Journal of the American Medical Association Feb. 28, 1914, Vol. LXII., pp. 668-671.

The prevalence of the scourge is known in a general way, but it can do no harm to look again at some figures showing approximately the widespread more or less hidden conditions. The army hospital reports of the various nations are the most readily available and from them White and Melville (1) have compiled a table (Table 1) showing the incidence of infection per 1,000 men.

TABLE 1. — *Venereal Infection per Thousand Men.*

	Years.	Per Cent.
Germany,	1905–06	19.8
France,	1906	28.6
Austria,	1907	54.2
Russia,	1906	62.7
United States,	1907	167.8
United Kingdom,	1907	68.4

Kober (2) gives a somewhat more recent and a more differentiated table (Table 2) also on the basis of 1,000 men.

TABLE 2. — *Differentiated Infections per Thousand Men.*

	Year.	Syphilis.	Chancroid.	Gonorrhea.	Total.
U. S. Army,	1909	30.45	30.77	135.77	196.99
U. S. Navy,	1909	26.49	28.23	105.11	159.83
Japanese Navy,	1907	–	–	–	139.75
British Navy,	1908	37.46	17.87	67.16	122.49
British Army,	1908	35.10	28.23	40.70	75.80
Japanese Army,	1907	10.10	10.40	17.10	37.60
Prussian Army,	1907	4.40	2.10	12.20	18.70

These tables show conclusively that the English-speaking people are, in their naval and military organizations at least, much greater sufferers from venereal infections than the other nations.

In civil life there is less accuracy in presenting figures, but Cunningham (3) says that 60 per cent. of men acquire venereal infections some time, 20 per cent. of these are incurred before the twentieth year, 50 per cent. before the twenty-fifth year, and 80 per cent. before the thirtieth year. Gerrish (4) estimates that 10 per cent. of the population of New York has syphilis and that 80 per cent. of it is acquired between the ages of 19 and 35 years. Fischer (5) thinks 18 per cent. represents the luetic cases in the United States and he further states that there are 250,000 deaths each year due to venereal infections. Biggs (6) finds that during the year 1912 there were 13,348 cases of syphilis reported, 24,980 cases of gonorrhea, and 4,331 cases of chancroid, a total of 42,659 venereal infections. These were reported by 1,500 of the 8,000 physicians in New York City, and do not include hospital and dispensary figures. His judgment is that there were about 200,000 cases during the year. McMurtrie (7) places on record statistics from seventeen dispensaries and thirteen hospitals for the year 1911. In the former he found 15,781 venereal cases and in the latter 5,380. The 5,380 means 6.33 per cent. of all the cases in the hospitals investigated and that is the more notable because of the very scanty hospital accommodation for such diseases. Morrow (8), in his reply to Cabot's criticism of the estimates he gave as to the frequency of venereal infection, reiterates his statement that 75 per cent. of adult males acquire gonorrhea at some time, and that from 5 to 10 per cent. acquire syphilis. He bases his figures not only on his own observations, but on the opinion of such men as Neisser and Fournier, and on the statistics found in the clinics and dispensaries of continental Europe. In this connection he calls attention to the unreliable reports furnished by our hospitals because cases of the primary diseases are not admitted, and only in the practically incurable stages are venereal cases given housing under such titles as arthritis, prostatitis or endometritis in gonorrheal patients and general paresis, tabes dorsalis, aneurysm and so forth in specific cases. Again Barrett (9) presents some evidence furnished by the pathologists of Melbourne, Australia, where 30 per cent. of 200 necropsies gave syphilitic findings. Besides that, 5 per cent. of the population within a ten-mile radius from the Melbourne post-office were positive to the Wassermann test. These findings can be multiplied by further reference to the literature, but they are ample to indicate the extent of the scourge.

This subject can be looked at from another angle. Morrow (10) quotes Osler as estimating that between 6,000 and 7,000 persons succumb to syphilis each year in England and Wales, and that is not including still-births, the larger proportion of which are due to lues. In fact, Osler puts syphilis in a class next to tuberculosis, pneumonia and cancer as a death-dealing agent. Then Mattauschek and Pilcz (11) find that of 4,134 officers of the Austrian army who contracted syphilis between 1880 and 1900, twenty died from the disease, 198 have general paresis, 113 have locomotor ataxia, 132 have cerebrospinal syphilis and of this latter number 80 are insane. Of course, many have died of intercurrent disease, but even considering that the conclusion reached in this investigation is that 14.64 per cent. of these better-class men are dead or disabled as a result of syphilis. Gonorrhea is not considered so malignant by the general run of men, but Morrow (8) assures us that 80 per cent. of deaths from infections peculiar to women are due to gonorrhea. Were it not for that disease the gynecologic departments of the hospitals might be almost done away with, for from 75 to 80 per cent. of all operations on the female genital tract are necessitated by gonorrheal infections (12). In addition to that, it is no small factor as a crippling agent. Cunningham (3) and Kober (2) are of the opinion that 10 to 30 per cent. of neisserian infections give rise to arthritis. So, then, in spite of popular opinion to the contrary, the four or six weeks' duration of an acute gonorrheal urethritis is a very serious matter. And then either disease may be acquired innocently — not only by ignorant wives who are the greatest sufferers from the gonococcus, but by fellow-workers, or even more casual associates of the carrier of the *Treponema pallidum* — the organism of syphilis. The crusade against the public drinking-cup has called attention to the possibility of transmitting syphilis through its agency and it is a well-known fact that the disease has been spread by glass-blowers' instruments. But the epidemic described by Schamberg (13), where nine people were infected with syphilis on account of the kissing proclivities of a young man with a chancre of the lip, should have been startling enough to beget immediate action.

The direct financial loss entailed has not been computed, but it could be approached from the proportion of taxes used in caring for our defectives, who are frequently the result of congenital lues, or for our insane or blind. A conservative estimate puts 10 per cent. of the insane in the Massachusetts asylums down to syphilis, and the yearly cost of their maintenance is $300,000 (3). Ophthalmologists assert that next to refractive errors, venereal infections are the most fruitful source of defective vision. Rosenstein (2) ventures the opinion that 20 to 25 per cent. of the inmates of our institutions for the blind are the result of gonorrhea alone.

Then there is the loss that can only be guessed at in the reduced efficiency of business people from the acute infections, from the rheumatisms, and from the mental and physical weakening caused by the late lesions of syphilis — before the patient is compelled to give up trying to work. Not only that, Knapp (14) suggests that the notable loss of life and property in railway accidents each year is partly due to syphilis, basing his conclusion on the finding of nine railway employees among 263 cases of general paresis in the Massachusetts hospitals for the insane in April, 1907. One of these men — an engine driver — had been "queer" for a year before his incarceration and had on one occasion finished his run several minutes ahead of time. Camp (15), pursuing a similar line of investigation, found thirteen railway men among eighty-seven cases of general paralysis in the state hospital at Kalamazoo, Mich., between July, 1910, and February, 1913.

Besides that, there is the absolute loss of time to industry by people in their earning years. Here again the accurate statistics from the various branches of the service are readily available and are summarized by Surgeon-General Rixey in his report for 1909 in the statement that the disability from venereal infections if applied to the force afloat would have rendered entirely inactive for over a month, three battle-ships with a complement of one thousand officers and men each. Table 3, taken from five of our leading hospitals in Chicago, shows a rather concrete loss in the matter of time spent in the hospital by people of earning years and rank.

TABLE 3. — *Loss of Time in Hospital.*

HOSPITAL.	Year.	GONORRHEA.		SYPHILIS.		CHANCROID.	
		Number of Cases.	Days Lost.	Number of Cases.	Days Lost.	Number of Cases.	Days Lost.
Presbyterian, . . .	1911–12	18	753	46	961	–	–
St. Luke's, ...	1912–13	11	142	52	593	–	–
Wesley, ...	1912–13	4	99	151	1,562	–	–
Michael Reese, . . .	1912–13	10	161	107	1,066	–	–
Cook County, . . .	1912	463	5,742	917	19,389	150	1,658

These figures include under syphilis, general paresis or dementia paralytica and locomotor ataxia or tabes dorsalis, which have been definitely proved to be specific by the demonstration of the spirochetes (16), and do not include aneurysms, 60 to 80 per cent. of which are generally conceded to be luetic. Neither do they include the cases of cerebral thrombosis and hemiplegia, which in a large percentage of cases are undoubtedly syphilitic. And let me repeat that these days lost are lost by people who should be producing. They do not include congenital syphilis, gonorrhea in children, or the cases listed in our hospitals under gynecology.

These, then, are the conditions. Now what has been done in combatting the plague? The frequently quoted scheme of continental Europe, which is to license prostitutes, and by periodic examinations see that they are clean enough to practice their calling, is of no value. In the first place, it is too unjust to be considered. The organisms of these diseases are rarely carried from one woman to another except by the mediation of the male host. And when one whore serves an average of twenty men in one day (17) what possible chance is there of keeping her clean by weekly or fortnightly examinations? Besides, the scheme has been discredited in the countries of its inception. In 1860 there were 200 licensed houses of prostitution in Paris, which now has less than fifty (1), and authorities there admit that the great majority of infections come from clandestine prostitution, which is practiced for many days before the woman is forced into the open pursuit of her calling. Then, again, the reports from the recruiting stations in cities in which regulated brothels exist, compared with those in which the bawdy houses are not regulated, show definitely that the incidence of infection among enlisted men is not a good index of the prevalence of the diseases among civilians. For example, in Berlin 7.66 per thousand were rejected because of venereal infection, whereas in London 5 per thousand were rejected for the same reason. This is the more noteworthy when we remember that the Berlin men are compelled to serve in the army while the enlistment from London is voluntary. And so it is evident that the unfair regulation of a small minority of infected folks is worse than useless.

Education is being strongly advocated and is of undoubted advantage. But education alone will not suffice, as witness the condition cited among the Austrian army officers and also the fact stated by Willson (18), in the discussion of his paper, that the medical students furnished a larger percentage of venereal infections than any other student group at the University of Pennsylvania. All the same, honest education of all classes will in time, work a tremendous change.

Another plan is that of putting these infections on the notifiable list as is done in Denmark. This scheme is properly urged by many writers. Utah has adopted such a law (19). So has the city of New York. In the latter place, as has been pointed out, only fifteen hundred of the eight thousand physicians were interested enough to report cases, and besides that, the members of the managing boards of three of the big hospitals went to the mayor to get him to rescind the action of the Board of Health (Biggs) (6). So it appears that this very sensible procedure has much to overcome in the way of inertia as well as active opposition before it becomes universal. But it will be adopted sooner or later, and as showing which way the wind blows the Social Service Committee of Canada (20) has presented resolutions to the government asking for notification of venereal diseases. Turner

(21) goes further and urges compulsory restraint of refractory cases until they are no longer a source of danger, while others there advocate the examination of all people arrested for any cause and the regulation and treatment of infectious cases until they are clean. These are all good ideas. The problem is a large one and must be approached from all sides. Of course, we must have education; we must also have notification of cases, preferably by name, but by number certainly if the other method is impracticable. And we must have absolute suppression of commercialized prostitution — not for the purpose of increasing morality, because there will be more or less promiscuous sexual intercourse as long as men and women live — but for the stamping out of known plague spots. And this is not impossible of accomplishment in a determined community, for apparently Iowa with its injunction and abatement law has the solution (22). And we must also urge the young man to marry early — to face economic conditions as they are and pit his youth, enthusiasm and sense of responsibility against them. These are all good general measures and will in time help to eliminate the diseases.

But the most crying need is provision for effective treatment of all cases. Physicians and laymen too long have regarded these infections as disgraces and not as diseases. They cannot be cured by ignoring them. In the city of New York in 1908 there were 150 beds for venereal patients, and Goldwater (23) thinks the conditions little improved even now. Biggs, however, succeeded last year in getting the Board of Estimates to provide for a pavilion at the Riverside Hospital for the isolation and treatment of cases needing such care. In Chicago we have only 125 beds available at present. Now, a gonorrhea, when acute, is curable in all but a very small percentage of cases (3 per cent., according to Kober), but when it comes for treatment as arthritis or endocarditis it is practically impossible to provide any material relief. Syphilis also is curable in the great majority of cases if vigorous treatment is persisted in for a long enough period (24). But when it appears for treatment in the form of general paresis, locomotor ataxia, aneurysm, cerebral thrombosis or what not, it can perhaps be arrested, but usually it means death in a relatively short time (three to five years), with more or less complete disability in the meantime. Camp (14) suggests for the advantage of railways and the traveling public that there be periodic examinations of railroad employees by competent neurologists for the purpose of finding the indications of late syphilis in the nervous system. That is commendable, but why not look for the syphilis when any practitioner can identify it, and by compelling the infected individual to take proper treatment absolutely prevent the later manifestations of the disease? We have in the complement-fixation test a proof that is more conclusive than anything yet found to tell us when a patient is free from the gonococcus. And in the Wassermann tests we have a reliable index of the presence or absence of the *Treponema pallidum.* The Lange gold colloidal test of the cerebrospinal fluid is perhaps even more conclusive when the central nervous system is involved (25). What we need, then, is proper hospital and laboratory facilities for the treatment and cure of active cases. And with reasonable co-operation these infections can be made as scarce as smallpox in one generation.

A great many corporations have a medical staff to care for their employees and to add to their efficiency. There is a notable economic waste due to the venereal diseases shown in the foregoing figures, and it would seem advisable to direct the attention of these medical departments to the detection and care of cases of this kind for the sake of promoting efficiency, not only during the acute stages, but also to prevent the later disabilities which come on when an employee has been long trained and should be of most value to the firm. The way in which this can best be accomplished must be worked out by each organization and its medical staff. Obviously the easiest way to begin such a campaign is to examine all new employees for evidence of disease and to question them as to past infection. In that way acute cases can be found and dealt with, and a premium will be put on denying the existence of any venereal lesion. Then quite a large number of quiescent cases of gonorrhea could be discovered by examining the prostatic fluid for the gonococcus. But the surest and most satisfactory plan would be a serum test for both gonorrhea and syphilis. Dr. A. M. Moody, pathologist at St. Luke's Hospital, tells me that a serum-testing laboratory can be equipped for first-class work for about $400 as follows: —

Centrifuge,	$100.00
Incubator,	50.00
Hot-air sterilizer,	50.00
Ice-box,	25.00
Cages,	50.00
Animals: 12 guinea-pigs, 2 rabbits, 3 hens,	15.00
Glassware, racks and baskets,	15.00
Miscellaneous expenses,	100.00

And that surely is not a prohibitive figure.

Then a number of business houses have mutual benefit associations. Employees applying for membership could be examined for venereal as well as other disease, and so not only would there be a check on new employees, but also on older members of the working force. And it would be well to ask prospective members of such an association to waive claim for any disability due to venereal infection, whether or not they were found clean. In fact, life and benefit insurance companies in general must see that their insured are much better risks when free from venereal taint. Serum tests ought to be part of the routine insurance examination, and premiums should vary with the results. Men frequently increase their insurance as they grow older, and it would be easy to check up the serum findings when a new policy is applied for. Recall for a moment that the 70 to 80 per cent. of gonorrheal gynecologic operations corresponds right closely to the estimated 75 per cent. of acquired gonorrhea in men — then why shouldn't the insurance company protect itself by increasing the premiums on a woman's policy as soon as she is married unless both she and her husband show negative serum tests? Perhaps that looks a bit lurid, but it is entirely feasible, and when the great American conscience is prodded on its pocketbook by such measures, there will shortly be such an outcry for the public weal as will not only give us ample regulative, hospital and laboratory accommodations to cope with the multitude of cases by which we are now confronted, but will, in a relatively few years, render these venereal diseases of little but historical interest.

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SANITARY ADVICE FOR SUMMER TOURISTS.[1]

By W. C. Rucker, Assistant Surgeon General, Public Health and Marine-Hospital Service.

With the advent of warm weather and the consequent closing of schools comes the thought of leaving the city for the cool country. The tired teacher and the over-worked clerk, the restive school boy, anxious to leave his books for the great out of doors, the society matron, bored by the constant round of social duties, all long to get away from the city and to spend the summer in some shady rural retreat. Too frequently the realization of this happy anticipation is a hasty return to the city and a long stay in the hospital, to be followed, perhaps, by the death of some loved one. Much of this may be avoided if reasonable care is exercised in the choice of the place to spend the summer.

Ordinarily the questions which are asked when one is seeking for such a place include the character of the food and beds, the extent and nature of the social life, the temperature of the air, and the opportunities for bathing. All of these are important, but they are of secondary consideration as compared with the question of the healthfulness of the locality in which it is intended to spend the warm months. Therefore, in choosing a summer residence the first thing to have in mind is the sanitary environment in which this time is to be spent.

Every autumn there is a rise in the number of typhoid cases in the cities, and when this is investigated it is frequently found that they

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[1] Reprint from the U. S. Public Health Reports, Vol. XXVII., No. 21, May 24, 1912.

are simply cases which have been imported from the country. Persons have left the city in search of health, and, as they are accustomed to think that health may be obtained and maintained best in the country, they accept it without question as the place to get health.

Typhoid fever is a disease which summer tourists frequently contract; therefore it is always well to bear the avoidance of this disease in mind in choosing a summer residence. Typhoid fever is a disease of man. The germ which causes it leaves the body of the person sick with the disease in his discharges, and when these are taken by a well person a secondary case of the disease is caused. The germs of typhoid fever are carried from the sick to the well in water and food and by flies and the fingers. If one does not take into his system the discharges of another person having typhoid fever he does not get typhoid fever. At the present time typhoid fever is essentially a disease of the country, because in the country the opportunities for the transference of the germs of the disease from the sick to the well are greater than they are in the city. Therefore in the choice of a place to spend the summer one should inquire into the occurrence of typhoid fever in the community in which it is intended to stay, and one should determine the opportunities which exist there for the carrying of the germs of typhoid fever from the sick to the well visitor.

Since the germ is carried in the discharges of persons sick with typhoid fever, a careful inspection should be made of the facilities for disposing of human excrement. A place which has a surface privy to which the domestic animals and fowls have free access should not be chosen. Places which have a pit privy or a cesspool situated only a short distance from a well should be avoided. Places which take their drinking water from streams which receive the drainage from outhouses or from buildings should likewise be regarded with suspicion. Other things being equal, places having a water supply from artesian or deep-driven wells should be given the preference. Unscreened toilets, because of the flies which they breed, and because of the chance which these insects have to pick up the germs of typhoid fever therein and carry them to the boarder's food, are particularly dangerous. It is equally important, both for the comfort and health of the guest, that the house also be screened.

It has been shown in the foregoing paragraphs how the fly may carry the germs of typhoid fever from the toilet to the kitchen and there infect the food which people eat. There is another way in which it may infect the food, and this is particularly important from the standpoint of the child. The source of the milk supply should always be investigated in choosing a place of summer residence, and if it is found, as is too frequently the case, to be from dirty, fly-infested stables, in which dirty cows are milked by dirty hands, it is best to give the place a wide berth.

Another insect to be avoided is the mosquito. It used to be thought that malaria was caused by night air, but nowadays it is known that the only bad thing about night air is the mosquito which it contains. This insect infects people with malaria by biting them and injecting the germ as it bites. Therefore when a place of summer residence is chosen it should not be an unscreened house, nor should it be in a swampy region, nor in a locality in which there are small pools of water well adapted to the breeding of mosquitoes.

Finally, if there is any doubt in the mind of the summer tourist let him consult the local health officer of the locality under consideration.

SANITARY ADVICE FOR KEEPERS OF SUMMER RESORTS.[1]

By W. C. Rucker, Assistant Surgeon General, Public Health and Marine-Hospital Service.

Until comparatively recent years if a keeper of a summer resort provided good housing and feeding facilities, suitable and proper social diversions, and a reasonable amount of rest and quiet, the keeper of the resort considered that he had done his duty well, and other things being equal was reasonably sure that he would have a fair return for his investment and effort. While all of these points are of no mean weight in the minds of persons who go to the seashore, the mountains, or the country to avoid the heat and discomforts of the city, they have become secondary, and the question which is now asked first of all is as to the healthfulness of the resort in question. Aside from the financial loss which the manager of a summer pleasure ground may sustain from an outbreak of sickness among his guests, there is a moral obligation to protect and further as far as possible their health interests.

In a general way it may be stated that disease is carried from the sick to the well, either directly by persons or indirectly by food and drink, dust, and insects. If the avenues for disease germs are closed there need be comparatively little disease. It is thus seen that most disease is environmental, and it is therefore the duty of persons who are in charge of summer resorts to maintain the environment of their guests in as healthful a condition as possible.

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[1] Reprint from the U. S. Public Health Reports, Vol. XXVII., No. 22, May 31, 1912.

The great source of disease in a summer resort is the toilet. In many localities it is of the most primitive pattern, and maintained in a condition of noisome filth which would not be tolerated under any other circumstances. Frequently it is merely a surface privy, to which the barnyard fowls and domestic animals have free access. Again there may be a pit privy, or a cesspool which drains into the well, or into the stream which furnishes the water for the establishment.

Inasmuch as typhoid fever, a disease which by preference spends the warm months at a summer resort, is caused by a germ which is peculiar to man, and which leaves the body of the sick patient in his discharges, it may be seen that any method of disposing of human excrement which does not absolutely insure that it will not be carried to well persons is faulty, not to say criminal. After the germ of typhoid fever has left the body of the sick patient in his discharges, it is carried to well persons in food or drink, or through the intermediation of flies or dirty fingers.

It is the duty of every keeper of a summer resort to provide clean, well-screened places of easement for his guests, and to see to it that the fecal material deposited in this place can not escape and find entrance into the food and drink of the guest. If there is a cesspool, or a pit, it must not leak, and it must be guarded against flies, because these insects, which are bred in filth and lead a life of sin and iniquity, carry the germs on their feet to the food stuffs in the kitchen or dining room, thus delivering the germs in a live and virulent condition to well people.

The selection of a water supply is of the utmost importance. It should not be from a stream which receives the drainage of human habitations. In this connection it may be remarked that the old theory of the self-purification of streams has been exploded. If well water is used, it should not be from a shallow surface well, nor should it be from a well which by any chance may receive the drainage of human dwellings. Other things being equal, driven or artesian wells are far preferable.

If there is any doubt as to the purity of the water, it should be sterilized, either by boiling or by the addition of calcium hypochlorite prior to using.

Mention has been made of the carriage of the germs of typhoid fever by dirty fingers. This does not necessarily mean fingers which are mechanically dirty. It has been found in recent years that a large number of persons who have had typhoid fever continue to pass the germs of that disease in their discharges for a considerable period after their recovery from the disease. These persons are called typhoid carriers. It is of course an impossibility for the manager of a summer resort to examine all of his employees to determine whether or not they may be carriers, but it is his duty, when selecting persons who are to be employed in the preparation and serving of food or cleaning the dishes and kitchen utensils, to enquire whether or not they have had typhoid fever recently, and to employ none who have been afflicted with that disease within three or four months.

It has been shown that flies carry disease. The model summer resort has no flies. This condition of affairs may be brought about by preventing their breeding, and by screening the hostelry against them. Flies breed in manure. Therefore the barnyard or stable should be kept scrupulously clean, and the manure stored in well-screened metal-lined bins. The stable itself should also be screened. This adds not only to the comfort of the guests, but also saves the horses and cattle a great deal of energy, which would otherwise be expended in fighting flies.

One of the things which city people most desire when going to the country is milk. Milk which is produced by dirty cows in a dirty stable, and secured and handled by dirty dairy hands, is unfit for human consumption. The best advertisement that any country resort can have is a clean, airy, wholesome dairy, in which clean cows are milked by clean laborers, and in which the processes to which the milk is subjected follow cleanliness of levitical scrupulosity.

It has been recommended that all of the buildings of a summer resort be screened. This not only excludes flies, but it also prevents the entrance of mosquitoes. Aside from the fact that these insects act as the producers of insomnia and irritating inflammations, they are also the purveyors of malaria, which they introduce into the system of the guests by biting them. While it is desirable that they be excluded, it is even more necessary that they be prevented from breeding. Most summer resort keepers breed their own mosquitoes, and a careful survey of the premises will discover small pools of water, unscreened rain-water barrels, and small collections of water in tin cans, flower pots, and other easily overlooked small receptacles, all of which may contain "wigglers," which are the immature forms of mosquitoes. If these are emptied or oiled, or have a considerable quantity of salt placed in them, they will cease to be producers. In fountains and ornamental pools, to which none of these methods may be applied, the planting of small fish will destroy the mosquito larvæ, and thus prevent their multiplication.

The careful tuberculosis patient may be quite harmless in a summer hotel, but those who are careless and expectorate promiscuously are a positive danger, and while such persons are always to be regarded with consideration and charity, it may become necessary to recommend that they spend their summer in a sanitarium, rather than in a public resort where they may endanger others.

There are two sorts of vermin which may be disease carriers, and with which the summer resort keeper is at constant war; these are the rat and the cockroach.

Rats stay where they can get food. Therefore if all food supplies intended for human beings, and all remnants of human food, be guarded against them their numbers will fall off considerably. Furthermore, if stables are maintained in a cleanly condition, and if the rats are excluded from feed rooms, they will find that they must move on or be starved to death. Those which remain may be killed off, either by poisoning with some reliable agent, such as phosphorus or arsenic paste. Traps will take off a good many, and a good active terrier makes an excellent agent for the extermination of these pests.

Cockroaches may be gotten rid of by starvation, that is, the protection of foodstuffs against them, absolute cleanliness, or by the use of some agent which kills cockroaches but is harmless to man. Borax mixed with sugar has been recommended for this purpose.

Finally let it be stated that if the keeper of a summer resort has any doubt as to the sanitary condition of his premises, or if he is brought face to face with any sanitary problem with which he does not know how to deal, it is his duty to consult the local health officer.

PELLAGRA, RABIES AND GERMAN MEASLES.

The State Board of Health, at a meeting held May 7, 1914, voted to make "Pellagra," "Rabies" and "German Measles" reportable under the provisions of sections 49, 50 and 52 of chapter 75 of the Revised Laws.

PELLAGRA AND RABIES.

Acting under authority of chapter 183 of the Acts of 1907, the State Board of Health, at a meeting held May 7, 1914, voted that "Pellagra" and "Rabies" be declared diseases "dangerous to the public health," within the meaning of chapter 213 of the Acts of 1902.

PREVENTION BETTER THAN CURE.

"Twas a dangerous cliff, as they freely confessed,
Though to walk near its crest was so pleasant;
But over its terrible edge there had slipped
A duke and full many a peasant.
So the people said something would have to be done,
But their projects did not at all tally.
Some said: "Put a fence 'round the edge of the cliff,"
Some, "An ambulance down in the valley."

But the cry for the ambulance carried the day,
For it spread through the neighboring city.
A fence may be useful or not, it is true,
But each heart became brimful of pity
For those who slipped over that dangerous cliff;
And the dwellers in highway and alley
Gave pounds or gave pence, not to put up a fence
But an ambulance down in the valley.

"For the cliff is all right if you're careful," they said,
"And if folks even slip and are dropping,
It isn't the slipping that hurts them so much
As the shock down below when they're stopping."
So day after day as those mishaps occurred,
Quick forth would these rescuers sally
To pick up the victims who fell off the cliff,
With the ambulance down in the valley.

Then an old sage remarked, "It's a marvel to me
That people give far more attention
To repairing results than to stopping the cause,
When they'd much better aim at prevention.
Let us stop at its source all this mischief," cried he;
"Come, neighbors and friends, let us rally.
If the cliff we will fence, we might almost dispense
With the ambulance down in the valley.

"Oh, he's a fanatic," the others rejoined.
"Dispense with the ambulance?" Never!
He'd dispense with all charities, too, if he could.
No, no! We'll support them forever!
Aren't we picking folks up just as fast as they fall?
And shall this man dictate to us? Shall he?
Why should people of sense stop to put up a fence
While their ambulance works in the valley?"

But a sensible few, who are practical, too,
Will not bear with such nonsense much longer.
They believe that prevention is better than cure,
And their party will soon be the stronger.
Encourage them, then, with your purse, voice and pen,
And (while other philanthropists dally)
They will scorn all pretence and put a stout fence
On the cliff that hangs over the valley.

Better guide well the young man than reclaim them when old,
For the voice of true wisdom is calling,
To rescue the fallen is good, but 'tis best
To prevent other people from falling.
Better close up the source of temptation and crime
Than deliver from dungeon or galley;
Better put a strong fence round the top of the cliff
Than an ambulance down in the valley.

— JOSEPH MALINES, in Twentieth Century Magazine.

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OF

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APPROVED BY

THE STATE BOARD OF PUBLICATION.

RETURNS OF DISEASES.

Cases of Diseases declared by the State Board of Health to be Dangerous to the Public Health.

[Under the provisions of section 52 of chapter 75 of the Revised Laws.]

DISEASE.	Week ending — May 2.	May 9.	May 16.	May 23.	May 30.	Total.
Diphtheria,	110	129	126	125	136	626
Measles,	562	554	489	490	438	2,533
Scarlet fever,	334	343	297	340	280	1,594
Typhoid fever,	27	31	30	32	19	139
Tuberculosis, pulmonary,	201	158	167	169	163	858
Tuberculous meningitis,	4	4	4	6	2	20
Tuberculosis, other forms,	14	14	8	10	8	54
Cerebro-spinal meningitis,	10	5	11	5	4	35
Whooping cough,	88	71	77	73	75	384
Varicella,	116	108	103	121	78	526
Ophthalmia neonatorum,	39	44	58	47	50	238
Anterior poliomyelitis,	1	1	1	1	1	5
Smallpox,	–	–	–	3	–	3
Trachoma,	–	3	–	2	1	6
Trichinosis,	–	–	–	–	1	1
Tetanus,	–	1	–	1	–	2
Typhus fever,	–	–	2	–	–	2

Cases of Infectious Diseases not included in the Above Table.

[Cases not notifiable under the provisions of section 52 of chapter 75 of the Revised Laws.]

DISEASE.	Week ending — May 2.	May 9.	May 16.	May 23.	May 30.	Total.
Mumps,	5	15	12	7	3	42
Lupel vulgaris,	1	–	–	–	–	1
Cervical adenitis,	1	–	–	–	–	1
Erysipelas,	–	1	2	–	–	3
Malaria,	–	1	1	–	–	2

RETURNS OF DEATHS.

Deaths from Diseases declared by the State Board of Health to be Dangerous to the Public Health in Cities and Towns of More than 10,000 Population.

[Under the provisions of chapter 210, Acts of 1913.]

Week ending May 2, 1914.

CITIES AND TOWNS.	Population. Census for 1910.	Total Number reported.	Tuberculosis, Pulmonary (or not classified).	Tuberculous Meningitis.	Tuberculosis, Other Forms.	Diphtheria.	Typhoid Fever.	Scarlet Fever.	Measles.	Whooping Cough.	Cerebro-spinal Meningitis.
Boston,	686,092	29[1] 33[2]	17[1] 19[2]	2[1] 3[2]	1[1] 1[2]	4[1] 4[2]	- -	2[1] 3[2]	2[1] 2[2]	- -	1[1] 1[2]
Worcester,	145,986	6	5	-	-	-	-	1	-	-	-
Fall River,	119,295	7	3	-	2	-	1	-	-	1	-
Lowell,	106,294	2	2	-	-	-	-	-	-	-	-
Cambridge,	104,839	6	5	-	-	-	-	-	-	1	-
New Bedford,	96,652	3	3	-	-	-	-	-	-	-	-
Lynn,	89,336	3	2	-	-	1	-	-	-	-	-
Springfield,	88,926	4	3	-	-	-	-	-	1	-	-
Lawrence,	85,892	-	-	-	-	-	-	-	-	-	-
Somerville,	77,236	1	1	-	-	-	-	-	-	-	-
Holyoke,	57,730	1	-	-	-	-	-	1	-	-	-
Brockton,	56,878	3	1	-	-	-	-	1	-	-	1
Malden,	44,404	1	-	-	-	1	-	-	-	-	-
Haverhill,	44,115	2	2	-	-	-	-	-	-	-	-
Salem,	43,697	-	-	-	-	-	-	-	-	-	-
Newton,	39,806	-	-	-	-	-	-	-	-	-	-
Fitchburg,	37,826	-	-	-	-	-	-	-	-	-	-
Taunton,	34,259	3	3	-	-	-	-	-	-	-	-
Everett,	33,484	1	1	-	-	-	-	-	-	-	-
Quincy,	32,642	-	-	-	-	-	-	-	-	-	-
Chelsea,	32,452	3	3	-	-	-	-	-	-	-	-
Pittsfield,	32,121	2	1	-	-	-	-	-	-	-	1
Waltham,	27,834	2	2	-	-	-	-	-	-	-	-
Brookline,	27,792	-	-	-	-	-	-	-	-	-	-
Chicopee,	25,401	-	-	-	-	-	-	-	-	-	-
Gloucester,	24,398	-	-	-	-	-	-	-	-	-	-
Medford,	23,150	1	-	-	-	1	-	-	-	-	-
North Adams,	22,019	-	-	-	-	-	-	-	-	-	-
Northampton,	19,431	1	1	-	-	-	-	-	-	-	-
Beverly,	18,650	-	-	-	-	-	-	-	-	-	-
Revere,	18,219	-	-	-	-	-	-	-	-	-	-
Leominster,	17,580	-	-	-	-	-	-	-	-	-	-
Attleborough,	16,215	-	-	-	-	-	-	-	-	-	-
Westfield,	16,044	1	-	-	-	-	-	-	1[3]	-	-
Peabody,	15,721	1	1	-	-	-	-	-	-	-	-
Melrose,	15,715	1	-	-	-	-	1	-	-	-	-
Woburn,	15,308	-	-	-	-	-	-	-	-	-	-
Newburyport,	14,949	-	-	-	-	-	-	-	-	-	-
Gardner,	14,699	-	-	-	-	-	-	-	-	-	-
Marlborough,	14,579	-	-	-	-	-	-	-	-	-	-
Clinton,	13,075	-	-	-	-	-	-	-	-	-	-
Milford,	13,055	-	-	-	-	-	-	-	-	-	-
Adams,	13,026	-	-	-	-	-	-	-	-	-	-
Framingham,	12,948	1	-	-	-	1	-	-	-	-	-
Weymouth,	12,895	-	-	-	-	-	-	-	-	-	-
Watertown,	12,875	-	-	-	-	-	-	-	-	-	-
Southbridge,	12,592	-	-	-	-	-	-	-	-	-	-
Plymouth,	12,141	-	-	-	-	-	-	-	-	-	-
Webster,	11,509	1	1	-	-	-	-	-	-	-	-
Methuen,	11,448	1	1	-	-	-	-	-	-	-	-
Wakefield,	11,404	-	-	-	-	-	-	-	-	-	-
Arlington,	11,187	-	-	-	-	-	-	-	-	-	-
Greenfield,	10,427	1	-	-	-	-	1	-	-	-	-
Winthrop,	10,132	-	-	-	-	-	-	-	-	-	-
Total of reporting towns,	2,014,326	92	60	3	3	8	3	6	4	2	3

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[1] Nonresidents deducted.
[2] Total deaths.
[3] With lobar pneumonia.

Week ending May 9, 1914.

CITIES AND TOWNS.	Population. Census for 1910.	Total Number reported.	Tuberculosis, Pulmonary (or not classified).	Tuberculous Meningitis.	Tuberculosis, Other Forms.	Diphtheria.	Typhoid Fever.	Scarlet Fever.	Measles.	Whooping Cough.	Cerebro-spinal Meningitis.
Boston,	686,092	28[1] 32[2]	17[1] 19[2]	4[1] 5[2]	1[1] 1[2]	2[1] 3[2]	- -	2[1] 2[2]	1[1] 1[2]	1[1] 1[2]	- -
Worcester,	145,986	8	6	1	1	-	-	-	-	-	-
Fall River,	119,295	6	4	-	-	-	-	-	-	2	-
Lowell,	106,294	1	1	-	-	-	-	-	-	-	-
Cambridge,	104,839	1	1	-	-	-	-	-	-	-	-
New Bedford,	96,652	-	-	-	-	-	-	-	-	-	-
Lynn,	89,336	6	4	-	1	1	-	-	-	-	-
Springfield,	88,926	5[3]	3	-	-	-	-	-	1	-	-
Lawrence,	85,892	-	-	-	-	-	-	-	-	-	-
Somerville,	77,236	1	-	-	-	-	-	1	-	-	-
Holyoke,	57,730	3	2	-	-	1	-	-	-	-	-
Brockton,	56,878	1	-	1	-	-	-	-	-	-	-
Malden,	44,404	1	-	-	-	-	-	1	-	-	-
Haverhill,	44,115	6	4	1	-	-	-	-	-	-	1
Salem,	43,697	-	-	-	-	-	-	-	-	-	-
Newton,	39,806	-	-	-	-	-	-	-	-	-	-
Fitchburg,	37,826	2	2	-	-	-	-	-	-	-	-
Taunton,	34,259	3	3	-	-	-	-	-	-	-	-
Everett,	33,484	2	1	-	1	-	-	-	-	-	-
Quincy,	32,642	-	-	-	-	-	-	-	-	-	-
Chelsea,	32,452	1	-	-	-	-	1	-	-	-	-
Pittsfield,	32,121	1	-	1	-	-	-	-	-	-	-
Waltham,	27,834	-	-	-	-	-	-	-	-	-	-
Brookline,	27,792	-	-	-	-	-	-	-	-	-	-
Chicopee,	25,401	2	-	-	-	2	-	-	-	-	-
Gloucester,	24,398	-	-	-	-	-	-	-	-	-	-
Medford,	23,150	1	1	-	-	-	-	-	-	-	-
North Adams,	22,019	1	1	-	-	-	-	-	-	-	-
Northampton,	19,431	-	-	-	-	-	-	-	-	-	-
Beverly,	18,650	2	2	-	-	-	-	-	-	-	-
Revere,	18,219	-	-	-	-	-	-	-	-	-	-
Leominster,	17,580	-	-	-	-	-	-	-	-	-	-
Attleborough,	16,215	1	1	-	-	-	-	-	-	-	-
Westfield,	16,044	1[1] 2[2]	1[1] 2[2]	- -	- -	- -	- -	- -	- -	- -	- -
Peabody,	15,721	-	-	-	-	-	-	-	-	-	-
Melrose,	15,715	-	-	-	-	-	-	-	-	-	-
Woburn,	15,308	1	1	-	-	-	-	-	-	-	-
Newburyport,	14,949	-	-	-	-	-	-	-	-	-	-
Gardner,	14,699	-	-	-	-	-	-	-	-	-	-
Marlborough,	14,579	-	-	-	-	-	-	-	-	-	-
Clinton,	13,075	2	2	-	-	-	-	-	-	-	-
Milford,	13,055	-	-	-	-	-	-	-	-	-	-
Adams,	13,026	-	-	-	-	-	-	-	-	-	-
Framingham,	12,948	-	-	-	-	-	-	-	-	-	-
Weymouth,	12,895	-	-	-	-	-	-	-	-	-	-
Watertown,	12,875	-	-	-	-	-	-	-	-	-	-
Southbridge,	12,592	-	-	-	-	-	-	-	-	-	-
Plymouth,	12,141	-	-	-	-	-	-	-	-	-	-
Webster,	11,509	-	-	-	-	-	-	-	-	-	-
Methuen,	11,448	-	-	-	-	-	-	-	-	-	-
Wakefield,	11,404	-	-	-	-	-	-	-	-	-	-
Arlington,	11,187	-	-	-	-	-	-	-	-	-	-
Greenfield,	10,427	-	-	-	-	-	-	-	-	-	-
Winthrop,	10,132	-	-	-	-	-	-	-	-	-	-
Total of reporting towns,	1,941,135	92	60	9	4	7	1	4	2	3	1

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[1] Nonresidents deducted. [2] Total deaths. [3] One death from tetanus.

Week ending May 16, 1914.

CITIES AND TOWNS.	Population. Census for 1910.	Total Number reported.	Tuberculosis, Pulmonary (or not classified).	Tuberculous Meningitis.	Tuberculosis, Other Forms.	Diphtheria.	Typhoid Fever.	Scarlet Fever.	Measles.	Whooping Cough.	Cerebro-spinal Meningitis.
Boston,	686,092	26[1] 30[2]	15[1] 17[2]	2[1] 3[2]	- -	3[1] 3[2]	- -	1[1] 1[2]	4[1] 5[2]	- -	1[1] 1[2]
Worcester,	145,986	5	3	-	1	-	1	-	-	-	-
Fall River,	119,295	5	5	-	-	-	-	-	-	-	-
Lowell,	106,294	2	2	-	-	-	-	-	-	-	-
Cambridge,	104,839	7	3	-	2	1	-	-	1	-	-
New Bedford,	96,652	7	5	2	-	-	-	-	-	-	-
Lynn,	89,336	4	3	-	-	-	1	-	-	-	-
Springfield,	88,926	3	1	-	-	1	1	-	-	-	-
Lawrence,	85,892	-	-	-	-	-	-	-	-	-	-
Somerville,	77,236	3	1	1	-	-	-	1	-	-	-
Holyoke,	57,730	1	-	-	-	1	-	-	-	-	-
Brockton,	56,878	5	3	1	-	1	-	-	-	-	-
Malden,	44,404	-	-	-	-	-	-	-	-	-	-
Haverhill,	44,115	1	1	-	-	-	-	-	-	-	-
Salem,	43,697	-	-	-	-	-	-	-	-	-	-
Newton,	39,806	1	-	-	-	-	-	1	-	-	-
Fitchburg,	37,826	2	2	-	-	-	-	-	-	-	-
Taunton,	34,259	2	2	-	-	-	-	-	-	-	-
Everett,	33,484	-	-	-	-	-	-	-	-	-	-
Quincy,	32,642	-	-	-	-	-	-	-	-	-	-
Chelsea,	32,452	3	2	-	-	1	-	-	-	-	-
Pittsfield,	32,121	2	2	-	-	-	-	-	-	-	-
Waltham,	27,834	4	1	1	1	1	-	-	-	-	-
Brookline,	27,792	-	-	-	-	-	-	-	-	-	-
Chicopee,	25,401	2	1	-	1	-	-	-	-	-	-
Gloucester,	24,398	-	-	-	-	-	-	-	-	-	-
Medford,	23,150	-	-	-	-	-	-	-	-	-	-
North Adams,	22,019	1	-	-	-	-	1	-	-	-	-
Northampton,	19,431	1	1	-	-	-	-	-	-	-	-
Beverly,	18,650	-	-	-	-	-	-	-	-	-	-
Revere,	18,219	-	-	-	-	-	-	-	-	-	-
Leominster,	17,580	-	-	-	-	-	-	-	-	-	-
Attleborough,	16,215	-	-	-	-	-	-	-	-	-	-
Westfield,	16,044	1	1	-	-	-	-	-	-	-	-
Peabody,	15,721	-	-	-	-	-	-	-	-	-	-
Melrose,	15,715	2	1	1	-	-	-	-	-	-	-
Woburn,	15,308	-	-	-	-	-	-	-	-	-	-
Newburyport,	14,949	-	-	-	-	-	-	-	-	-	-
Gardner,	14,699	-	-	-	-	-	-	-	-	-	-
Marlborough,	14,579	-	-	-	-	-	-	-	-	-	-
Clinton,	13,075	-	-	-	-	-	-	-	-	-	-
Milford,	13,055	-	-	-	-	-	-	-	-	-	-
Adams,	13,026	-	-	-	-	-	-	-	-	-	-
Framingham,	12,948	-	-	-	-	-	-	-	-	-	-
Weymouth,	12,895	-	-	-	-	-	-	-	-	-	-
Watertown,	12,875	-	-	-	-	-	-	-	-	-	-
Southbridge,	12,592	1	1	-	-	-	-	-	-	-	-
Plymouth,	12,141	-	-	-	-	-	-	-	-	-	-
Webster,	11,509	1	1	-	-	-	-	-	-	-	-
Methuen,	11,448	1	-	-	-	1	-	-	-	-	-
Wakefield,	11,404	-	-	-	-	-	-	-	-	-	-
Arlington,	11,187	-	-	-	-	-	-	-	-	-	-
Greenfield,	10,427	-	-	-	-	-	-	-	-	-	-
Winthrop,	10,132	-	-	-	-	-	-	-	-	-	-
Total of reporting towns,	2,011,836	97	59	9	5	10	4	3	6	-	1

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[1] Nonresidents deducted.

[2] Total deaths.

Week ending May 23, 1914.

CITIES AND TOWNS.	Population. Census for 1910.	Total Number reported.	Tuberculosis, Pulmonary (or not classified).	Tuberculous Meningitis.	Tuberculosis, Other Forms.	Diphtheria.	Typhoid Fever.	Scarlet Fever.	Measles.	Whooping Cough.	Cerebro-spinal Meningitis.
Boston,	686,092	30[1] 33[2]	20[1] 23[2]	2[1] 2[2]	1[1] 1[2]	1[1] 1[2]	- -	- -	5[1] 5[2]	- -	1[1] 1[2]
Worcester,	145,986	3	1	-	2	-	-	-	-	-	-
Fall River,	119,295	9	5	1	-	-	1	1	-	1	-
Lowell,	106,294	2	-	1	1	-	-	-	-	-	-
Cambridge,	104,839	7	5	1	-	-	-	-	-	1	-
New Bedford,	96,652	9	6	1	1	-	-	-	-	-	1
Lynn,	89,336	2	1	-	-	1	-	-	-	-	-
Springfield,	88,926	3	1	-	1	-	1	-	-	-	-
Lawrence,	85,892	-	-	-	-	-	-	-	-	-	-
Somerville,	77,236	5	2	-	-	3	-	-	-	-	-
Holyoke,	57,730	3	1	-	1	-	-	1	-	-	-
Brockton,	56,878	2	-	-	-	-	-	-	-	2	-
Malden,	44,404	3	2	-	-	1	-	-	-	-	-
Haverhill,	44,115	5	3	1	-	-	-	-	1	-	-
Salem,	43,697	-	-	-	-	-	-	-	-	-	-
Newton,	39,806	-	-	-	-	-	-	-	-	-	-
Fitchburg,	37,826	-	-	-	-	-	-	-	-	-	-
Taunton,	34,259	1	1	-	-	-	-	-	-	-	-
Everett,	33,484	1	-	1	-	-	-	-	-	-	-
Quincy,	32,642	-	-	-	-	-	-	-	-	-	-
Chelsea,	32,452	3	2	-	-	-	-	-	-	-	1
Pittsfield,	32,121	-	-	-	-	-	-	-	-	-	-
Waltham,	27,834	-	-	-	-	-	-	-	-	-	-
Brookline,	27,792	-	-	-	-	-	-	-	-	-	-
Chicopee,	25,401	1	1	-	-	-	-	-	-	-	-
Gloucester,	24,398	-	-	-	-	-	-	-	-	-	-
Medford,	23,150	-	-	-	-	-	-	-	-	-	-
North Adams,	22,019	-	-	-	-	-	-	-	-	-	-
Northampton,	19,431	2	2	-	-	-	-	-	-	-	-
Beverly,	18,650	-	-	-	-	-	-	-	-	-	-
Revere,	18,219	-	-	-	-	-	-	-	-	-	-
Leominster,	17,580	-	-	-	-	-	-	-	-	-	-
Attleborough,	16,215	-	-	-	-	-	-	-	-	-	-
Westfield,	16,044	-	-	-	-	-	-	-	-	-	-
Peabody,	15,721	-	-	-	-	-	-	-	-	-	-
Melrose,	15,715	-	-	-	-	-	-	-	-	-	-
Woburn,	15,308	1	1	-	-	-	-	-	-	-	-
Newburyport,	14,949	-	-	-	-	-	-	-	-	-	-
Gardner,	14,699	-	-	-	-	-	-	-	-	-	-
Marlborough,	14,579	-	-	-	-	-	-	-	-	-	-
Clinton,	13,075	2	1	-	-	-	-	-	-	-	1
Milford,	13,055	-	-	-	-	-	-	-	-	-	-
Adams,	13,026	1	1	-	-	-	-	-	-	-	-
Framingham,	12,948	-	-	-	-	-	-	-	-	-	-
Weymouth,	12,895	-	-	-	-	-	-	-	-	-	-
Watertown,	12,875	-	-	-	-	-	-	-	-	-	-
Southbridge,	12,592	-	-	-	-	-	-	-	-	-	-
Plymouth,	12,141	-	-	-	-	-	-	-	-	-	-
Webster,	11,509	-	-	-	-	-	-	-	-	-	-
Methuen,	11,448	-	-	-	-	-	-	-	-	-	-
Wakefield,	11,404	1	1	-	-	-	-	-	-	-	-
Arlington,	11,187	-	-	-	-	-	-	-	-	-	-
Greenfield,	10,427	-	-	-	-	-	-	-	-	-	-
Winthrop,	10,132	-	-	-	-	-	-	-	-	-	-
Total of reporting towns,	1,915,623	99	60	8	7	6	2	2	6	4	4

[1] Nonresidents deducted.

[2] Total deaths.

Week ending May 30, 1914.

CITIES AND TOWNS.	Population. Census for 1910.	Total Number reported.	Tuberculosis, Pulmonary (or not classified).	Tuberculous Meningitis.	Tuberculosis, Other Forms.	Diphtheria.	Typhoid Fever.	Scarlet Fever.	Measles.	Whooping Cough.	Cerebro-spinal Meningitis.
Boston,	686,092	28[3] 34[4]	15[1] 17[2]	1[1] 1[2]	1[1] 1[2]	4[1] 5[2]	1[1] 1[2]	3[1] 4[2]	– –	– 1[2]	1[1] 1[2]
Worcester,	145,986	8	2	2	2	–	–	1	–	1	–
Fall River,	119,295	8	5	–	–	2	1	–	–	–	–
Lowell,	106,294	5	4	–	–	–	–	–	–	1	–
Cambridge,	104,839	2	2	–	–	–	–	–	–	–	–
New Bedford,	96,652	3	1	–	–	–	1	–	–	–	1
Lynn,	89,336	1	1	–	–	–	–	–	–	–	–
Springfield,	88,926	2	1	–	1	–	–	–	–	–	–
Lawrence,	85,892	–	–	–	–	–	–	–	–	–	–
Somerville,	77,236	–	–	–	–	–	–	–	–	–	–
Holyoke,	57,730	3	2	–	1	–	–	–	–	–	–
Brockton,	56,878	3	2	–	–	–	1	–	–	–	–
Malden,	44,404	3	3	–	–	–	–	–	–	–	–
Haverhill,	44,115	3	2	–	–	–	1	–	–	–	–
Salem,	43,697	–	–	–	–	–	–	–	–	–	–
Newton,	39,806	–	–	–	–	–	–	–	–	–	–
Fitchburg,	37,826	2	2	–	–	–	–	–	–	–	–
Taunton,	34,259	–	–	–	–	–	–	–	–	–	–
Everett,	33,484	–	–	–	–	–	–	–	–	–	–
Quincy,	32,642	–	–	–	–	–	–	–	–	–	–
Chelsea,	32,452	1	1	–	–	–	–	–	–	–	–
Pittsfield,	32,121	–	–	–	–	–	–	–	–	–	–
Waltham,	27,834	–	–	–	–	–	–	–	–	–	–
Brookline,	27,792	–	–	–	–	–	–	–	–	–	–
Chicopee,	25,401	1	–	–	–	1	–	–	–	–	–
Gloucester,	24,398	–	–	–	–	–	–	–	–	–	–
Medford,	23,150	–	–	–	–	–	–	–	–	–	–
North Adams,	22,019	1	1	–	–	–	–	–	–	–	–
Northampton,	19,431	–	–	–	–	–	–	–	–	–	–
Beverly,	18,650	–	–	–	–	–	–	–	–	–	–
Revere,	18,219	–	–	–	–	–	–	–	–	–	–
Leominster,	17,580	–	–	–	–	–	–	–	–	–	–
Attleborough,	16,215	–	–	–	–	–	–	–	–	–	–
Westfield,	16,044	–[1] 1[2]	–[1] 1[2]	–	–	–	–	–	–	–	–
Peabody,	15,721	1	–	1	–	–	–	–	–	–	–
Melrose,	15,715	–	–	–	–	–	–	–	–	–	–
Woburn,	15,308	–	–	–	–	–	–	–	–	–	–
Newburyport,	14,949	–	–	–	–	–	–	–	–	–	–
Gardner,	14,699	–	–	–	–	–	–	–	–	–	–
Marlborough,	14,579	–	–	–	–	–	–	–	–	–	–
Clinton,	13,075	2	1	–	1	–	–	–	–	–	–
Milford,	13,055	–	–	–	–	–	–	–	–	–	–
Adams,	13,026	–	–	–	–	–	–	–	–	–	–
Framingham,	12,948	1	–	1	–	–	–	–	–	–	–
Weymouth,	12,895	–	–	–	–	–	–	–	–	–	–
Watertown,	12,875	–	–	–	–	–	–	–	–	–	–
Southbridge,	12,592	–	–	–	–	–	–	–	–	–	–
Plymouth,	12,141	–	–	–	–	–	–	–	–	–	–
Webster,	11,509	–	–	–	–	–	–	–	–	–	–
Methuen,	11,448	–	–	–	–	–	–	–	–	–	–
Wakefield,	11,404	–	–	–	–	–	–	–	–	–	–
Arlington,	11,187	–	–	–	–	–	–	–	–	–	–
Greenfield,	10,427	–	–	–	–	–	–	–	–	–	–
Winthrop,	10,132	–	–	–	–	–	–	–	–	–	–
Total of reporting towns,	1,816,033	85	48	5	6	8	5	5	–	3	2

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[1] Nonresidents deducted.

[2] Total deaths.

[3] Non-residents deducted: 2 deaths from anterior poliomyelitis.

[4] Total deaths: two deaths from anterior poliomyelitis; one death from trichinosis.

DEATHS FROM DISEASES DECLARED BY THE STATE BOARD OF HEALTH TO BE DANGEROUS TO THE PUBLIC HEALTH IN TOWNS OF LESS THAN 10,000 POPULATION.

[Under the provisions of chapter 210, Acts of 1913.]

DISEASE.	Place.	WEEK ENDING —				
		May 2.	May 9.	May 16.	May 23.	May 30.
Tuberculosis, pulmonary (or not classified).	Amesbury, .	–	1	1	–	–
	Blackstone, .	–	–	–	1	–
	Braintree, .	–	–	1	–	–
	Bridgewater, .	–	–	–	1	1
	Canton, . .	–	–	1	–	–
	Douglas, . .	–	–	–	1	–
	Erving, . .	–	–	–	1	–
	Franklin, .	–	–	–	–	1
	Lexington, .	1	–	–	–	–
	Ludlow, . .	1	–	–	–	–
	N. Attleborough,	1	2	–	–	–
	Norwood, .	1	–	–	–	–
	Sandwich, .	–	1	–	–	–
	Spencer, . .	4	–	–	–	–
	Weymouth, .	–	–	–	1	–
	Whitman, .	–	–	1	–	–
Total, . .	. . . . .	8	4	4	5	2
Tuberculous meningitis.	Dedham, .	–	1	–	–	–
	North Andover,	–	–	1	–	–
Total, . .	. . . . .	–	1	1	–	–
Tuberculosis, other forms.	Easthampton, .	1	–	–	–	–
	Medfield,. .	–	–	1	–	–
Total, . .	. . . . .	1	–	1	–	–
Diphtheria, . .	Dedham, .	–	1	–	–	–
Typhoid fever, . .	Ludlow, . .	–	–	–	–	1
	Rowley, . .	–	–	–	1	–
Total, . .	. . . . .	–	–	–	1	1
Measles, . . .	Hull, . .	–	1	–	–	–
Cerebro-spinal meningitis, . . .	Bridgewater, .	1	–	–	–	–
	Franklin, .	–	–	–	–	1
Total, . .	. . . . .	1	–	–	–	1

REPORT ON INSPECTION OF FOOD AND DRUGS.

LABORATORY EXAMINATIONS OF FOOD AND DRUGS.

The following tables present the results of the laboratory examinations during the month of May, 1914, of samples of food and drugs collected by inspectors of the Board: —

The cities and towns in which samples were collected were: Adams, Andover, Attleborough, Boston, Cambridge, Concord, Danvers, Easton, Everett, Greenfield, Harvard, Holyoke, Ipswich, Lowell, Marlborough, Melrose, Middleton, Millbury, Natick, North Adams, Pittsfield, Reading, Salem, Somerville, Springfield, Wakefield, Waltham, Webster, Weymouth, Williamstown, Woburn, Worcester.

Summary of Analyses.

ARTICLES EXAMINED.	Number found to be of Good Quality.	Number adulterated or varying from the Legal Standard.	Total.
Butter,	2	1	3
Buttermilk,	–	1	1
Canned vegetables,	1	–	1
Canned fish,	1	–	1
Clam bouillion,	1	–	1
Chocolate,	1	–	1
Coffee,	8	1	9
Condensed milk,	1	2	3
Confectionery,	2	–	2
Cream,	13	1	14
Drugs,	77	16	93
Fruit juice,	1	–	1
Flavoring extracts: —			
Lemon,	1	–	1
Vanilla,	1	–	1
Food color,	1	–	1
Grape juice,	1	–	1
Ice cream,	9	–	9
Jams and jellies,	1	1	2
Maple sugar,	14	2	16
Maple syrup,	1	1	2
Meat products: —			
Steak,	1	–	1
Milk,	322	131	453
Olive oil,	3	–	3
Proprietary food,	1	–	1
Shrimp,	1	1	2
Soft drinks,	2	–	2
Syrups,	2	–	2
Table sauce,	1	–	1
Totals,	470	158	628

PROSECUTIONS FOR VIOLATIONS OF THE LAW RELATING TO FOOD AND DRUGS.

Three convictions were secured during the month of May, 1914, for selling adulterated food as follows: —

No.	NAME OF DEFENDANT.	Place.	Character of Article sold.
1	Parks Sausage and Provision Company.,	Boston,	Frankfurts (potato starch).[1]
2	Harry N. Whitney,	No. Attleborough,	Milk (total solids, 10.20).[2]
3	Parks Sausage and Provision Company.	Boston,	Sausage (cereal).[1]

[1] Appealed.
[2] Watered.

Fines imposed, $100.

LIST OF SAMPLES OF FOOD, DRUGS AND MILK COLLECTED DURING THE MONTH OF MAY, 1914.

Samples of Food in which No Adulteration was detected.

BUTTER.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
6779-S	John Boggs, Cambridge,	Meadow Gold. Fox River Butter Company.

CANNED FRUITS AND VEGETABLES.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
6757-S	Cobb, Bates & Yerxa Company, Boston,	Larsen's Special Marrowfat Peas. Wm. Larsen Canning Company, Green Bay, Wis.

CANNED MEATS AND FISH.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
6761-S	Cobb, Bates & Yerxa Company, Boston,	Royal Purple Canned Shrimp. Cobb, Bates & Yerxa Company, Boston, Mass.

CIDER.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
6833-S	Delaney Wine Company, Springfield.	
6791-S	F. L. Horne, West Springfield.	
6793-S	F. L. Horne, West Springfield.	
6795-S	F. L. Horne, West Springfield.	
6797-S	F. L. Horne, West Springfield.	
6799-S	F. L. Horne, West Springfield.	
6801-S	F. L. Horne, West Springfield.	

Samples of Food in which No Adulteration was detected — Continued.

CLAM BOUILLON.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
24312	C. Forbush & Co., Worcester,	Saltesea Clam Bouillon. American Oyster Company, Providence, R. I.

CHOCOLATE.

24229	Direct Importing Company, Marlborough,	Benefit.

COFFEE.

24192	C. A. Folsom, East Boston.	
24194	William Scott, East Boston.	
24195	William Scott, East Boston.	
24206	William Scott, East Boston.	

CONDENSED MILK.

6789-S	A. H. Morse & Co., Boston,	Wisconsin Condensed Milk Company, Burlington, Vt., Lion Evaporated Milk.

CONFECTIONERY.

23853	Crofts & Reed, Chicago, Ill.,	Sweet Chocolate C. & R. Crofts & Reed, Chicago, Ill.
6927-S	A. Faice, Adams, Mass.	

FLAVORING EXTRACTS.

Lemon.

24307	Van Dyke Company, Worcester,	Ambassador. James Van Dyke Company, New York.
24308	Front Street Market, Worcester,	Providence Public Market Company, Providence, R. I.
24493	T. C. Farley, North Adams.	

ICE CREAM.

7938-R	S. Bartelomeo, Concord,	Chocolate Ice Cream.
7039-S	S. Bartelomeo, Concord,	Vanilla, Jersey Ice Cream.
7936-R	John C. Friend, Concord,	Chocolate. Bushway Ice Cream Company, Somerville, Mass.
7934-R	Urquhart Bakery, Concord,	Vanilla Ice Cream.
7932-R	McConnell's Drug Store, Concord,	Strawberry. Davis Ice Cream Company, Cambridge, Mass.
7037-S	Richardson Pharmacy, Concord,	Vanilla.

JAMS AND JELLIES.

24398	Towne & Lindman, Boston,	Atwood's Raspberry Jam. Atwood Preserving Company, Cambridge, Mass.

Samples of Food in which No Adulteration was detected — Concluded.

MAPLE SUGAR.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
24311	B. F. Arnold, Worcester.	
24375	Cobb, Hersey & Co., Boston.	
24401	Counis Bros., Boston.	
24377	Dudley Candy Kitchen, Boston.	
6925-S	A. Faice, Adams.	
24310	Front Street Market, Worcester.	
24381	Fruit Store, Center and Keger streets, Boston.	
24379	Fruit Store, Center and Sedgwick streets, Boston.	
6979-S	Home Bakery, Reading.	
24329	Johnson & Co., Boston.	
24330	Johnson & Co., Boston.	
24378	Porter's Market, Boston.	
6929-S	Store, Dudley Street, opposite Elevated, Boston.	

MAPLE SYRUP.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
24303	Protective Union, Worcester.	

OLIVE OIL.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
6497-S	Benefit Tea Store, Lawrence, ...	Benefit. Direct Importing Company, Boston.
24400	Counis Bros.	
23696	D. Mazzone, Newton Upper Falls, . . .	La Patria. La Patria Olive Oil, Italy.

SOFT DRINKS.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
24396	E. E. Gray Company, Boston, ...	Pequot Orange Tonic. Attleborough Bottling Company, Attleborough, Mass.
24397	E. E. Gray Company, Boston, ...	Pequot Sarsaparilla Tonic. Attleborough Bottling Company, Attleborough, Mass.

Samples of Food which upon Examination were found to be labeled in Accordance with Law.

FRUIT JUICES.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
24304	Protective Union, Worcester, ...	Hay's Five Fruit Syrup. H. H. Hay's Sons, Portland, Me.

OLEOMARGARINE.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
6777-S	John Boggs, Cambridge.	

Samples of Food which upon Examination were found to be adulterated.

CIDER (CONTAINING BENZOIC ACID).

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
7007-S	Antonio Makros, Wakefield.	

COFFEE[1] (CONTAINING CHICORY AND CEREAL).

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
6289-S	Lawrence, ...	Commercial Packing Company, Boston.

JAMS AND JELLIES (CONTAINING BENZOIC ACID).

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
24399	Towne & Lindman, Boston, ...	Atwood's Strawberry Jam. Atwood Preserving Company, Cambridge, Mass.

MAPLE SUGAR (CONTAINING CANE SUGAR).

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
24380	Fruit Store, corner Center and Sedgwick streets, Boston.	
24405	Fruit Store, 1465 Washington Street, Boston.	

OLEOMARGARINE (SOLD AS BUTTER).

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
6775-S	John Boggs, Cambridge.	

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[1] Per cent. of ingredients not stated.

Samples of Drugs in which No Adulteration was detected.

ALCOHOL.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
24285	Boylston Tavern Tap, Boston, ...	August Thiel & Co., Boston.
24331	M. S. Morton & Son, Forest Hills, Boston.	
q 13497	W. A. Phillips, Rockland.	

BLUE OINTMENT.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
6785-S	Linus D. Drury, Roxbury.	
6781-S	Economical Drug Company, Roxbury.	
6603-S	W. R. Hagyard, Pittsfield.	
6783-S	Hawthorne Pharmacy, Roxbury.	
6923-S	McKinley Square Pharmacy, Adams.	
6943-S	Roitman Bros., Boston.	

SPIRIT OF ANISE.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
q 13533	City Square Pharmacy, Charlestown.	
q 13535	A. L. Kimball, Charlestown.	

Samples of Drugs in which No Adulteration was detected — Continued.

SPIRIT OF CAMPHOR.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
24315	E. J. Churchill, Worcester.	

SPIRIT OF NITROUS ETHER.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
24261	Brewer & Co., Fall River.	
6933–S	Burroughs Bros., Boston.	
24316	E. J. Churchill, Worcester.	
q 13534	City Square Pharmacy, Charlestown.	
24321	Foley the Druggist, Worcester.	
6931–S	I. P. Gammon, Boston.	
24283	Glen Road Pharmacy, Jamaica Plain.	
24267	Hall & Co.'s Pharmacy, Jamaica Plain.	
q 13681	Hasting's Pharmacy, North Adams.	
24319	M. G. Hirshon, Worcester.	
q 13717	The Hovey Pharmacy, Greenfield.	
6945–S	Jos. J. Howe, Boston.	
24291	George Crowell Ketchum, Hyde Park.	
q 13536	A. L. Kimball, Charlestown.	
24264	Lynch's Pharmacy, Jamaica Plain.	
24294	Everett Square Pharmacy, Hyde Park.	
24279	Truman T. Reid, Boston.	
q 13679	River Street Drug Store, North Adams.	
24263	Chas. B. Rogers & Co., Jamaica Plain.	
24270	John R. Sawyer, Jamaica Plain.	
6981–S	Shepard & Norwell, Boston.	
q 13531	Walker-Rintels Drug Store, Boston.	
24276	White's Pharmacy, Jamaica Plain.	
24288	Thomas F. Fallon, Hyde Park.	

SPIRIT OF PEPPERMINT.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
24318	Arkus' Pharmacy, Worcester.	
24296	Brown's Pharmacy, Roxbury.	
24477	Buffington Pharmacy, Worcester.	
24480	William L. Davis, Worcester.	
24299	John L. Dunn, Hyde Park.	
24272	Ernst, the Druggist, Boston.	
24274	Ernst, the Druggist, Boston.	
24295	Everett Square Pharmacy, Hyde Park.	
24289	Thomas Fallon, Hyde Park.	
q 13712	Fiske & Strecker, Greenfield.	
24320	Foly the Druggist, Worcester.	
q 13703	F. M. Gardner & Co., Boston.	
24282	Glen Road Pharmacy, Jamaica Plain.	
24268	Hall & Co., Jamaica Plain.	
q 13682	Hastings Pharmacy, North Adams.	
q 13716	The Geo. H. Hovey Company, Springfield.	
24402	Hubbell & McGowan, Boston.	
24290	Geo. C. Ketchum, Hyde Park.	
24300	C. W. Lund, Hyde Park.	
24265	Lynch's Pharmacy, Jamaica Plain.	
24404	M. J. McIntire, Boston.	
24481	People's Pharmacy, Worcester.	
24278	Truman T. Reid, Roxbury.	
q 13677	Rice's Drug Store, North Adams.	
24262	Chas. B. Rogers & Co., Jamaica Plain.	
24271	John R. Sawyer, Jamaica Plain.	
24281	E. I. Sawyer, Boston.	
24484	Scandinavian Pharmacy, Worcester.	
24485	N. R. Scott, Worcester.	
q 13714	Wells & Nash, Springfield.	
24277	White's Pharmacy, Jamaica Plain.	

Samples of Drugs in which No Adulteration was detected — Concluded.

TINCTURE OF IODINE.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
6939-S	Bay State Pharmacy, Boston.	
6937-S	Brookline Pharmacy, Boston.	
24403	William Corner, Boston.	
q 13705	Farlay Drug Company, Boston.	
q 13704	Hasting's Pharmacy, North Adams.	
q 13680	River Street Drug Store, North Adams.	

ZINC OINTMENT.

6921-S	Kiley & Co., Adams.	

Samples of Drugs which upon Examination were found to be adulterated.

SPIRIT OF ANISE.

Number of Sample.	DEALER.	Wholesaler or Manufacturer.	Per Cent. of required Strength.
24314	Levasseur's Washington Square Pharmacy, Worcester, ...	- -	87

SPIRIT OF CAMPHOR.

24317	B. J. Elkind Company, Worcester, . . .	- -	60
24313	Levasseur's Washington Square Pharmacy, Worcester, ...	- -	75

SPIRIT OF NITROUS ETHER.

6947-S	Morse-Winslow Drug Shop, Boston, . . .	- -	69
24280	E. I. Sawyer, Boston, ...	- -	41
24487	Wilson House Drug Store, North Adams, . .	- -	57

SPIRIT OF PEPPERMINT.

24490	River Street Drug Store, North Adams, . .	- -	72

TINCTURE OF IODINE.

q 13678	Wilson House Drug Store, North Adams, . .	- -	74

Samples of Milk which upon Examination were found to be adulterated.

Number of Sample.	Name of Dealer, Wholesaler or Producer.	Results of Analyses.
24345	D. A. Brigham, Millbury, . . .	Total solids, 10.32 per cent.; fat, 0.50 per cent.; skimmed milk.
24346	D. A. Brigham, Millbury, . . .	Total solids, 10.46 per cent.; fat, 0.70 per cent.; skimmed milk.
6839–S	Charles G. Day, Ipswich, . . .	Total solids, 11.40 per cent.; fat, 3.30 per cent.; contained added water.
6841–S	Charles G. Day, Ipswich, . . .	Total solids, 11.52 per cent.; fat, 3.40 per cent.; contained added water.
6843–S	Charles G. Day, Ipswich, . . .	Total solids, 11.44 per cent.; fat, 3.30 per cent.; contained added water.
6845–S	Charles G. Day, Ipswich, . . .	Total solids, 11.42 per cent.; fat, 3.30 per cent.; contained added water.
6847–S	Charles G. Day, Ipswich, . . .	Total solids, 11.60 per cent.; fat, 3.30 per cent.; contained added water.
6849–S	Charles G. Day, Ipswich, . . .	Total solids, 11.24 per cent.; fat, 3.20 per cent.; contained added water.
6851–S	Charles G. Day, Ipswich, . . .	Total solids, 11.42 per cent.; fat, 3.40 per cent.; contained added water.
6853–S	Charles G. Day, Ipswich, . . .	Total solids, 11.70 per cent.; fat, 3.40 per cent.; contained added water.
6855–S	Charles G. Day, Ipswich, . . .	Total solids, 11.64 per cent.; fat, 3.40 per cent.; contained added water.
6857–S	Charles G. Day, Ipswich, . . .	Total solids, 10.74 per cent.; fat, 3.30 per cent.; contained added water.
6859–S	Charles G. Day, Ipswich, . . .	Total solids, 11.54 per cent.; fat, 3.50 per cent.; contained added water.
6861–S	Charles G. Day, Ipswich, . . .	Total solids, 11.48 per cent.; fat, 3.40 per cent.; contained added water.
6863–S	Charles G. Day, Ipswich, . . .	Total solids, 11.58 per cent.; fat, 3.40 per cent.; contained added water.
6865–S	Charles G. Day, Ipswich, . . .	Total solids, 11.66 per cent.; fat, 3.50 per cent.; contained added water.
6867–S	Charles G. Day, Ipswich, . . .	Total solids, 11.34 per cent.; fat, 3.40 per cent.; contained added water.
24520	J. Dumas, Webster, ...	Total solids, 10.56 per cent.; fat, 2.60 per cent.; contained added water.
24432	E. C. Putnam, Millbury, . . .	Total solids, 11.14 per cent.; fat, 3.40 per cent.; contained added water.
24339	E. C. Putnam, Millbury, . . .	Total solids, 9.72 per cent.; fat, 2.50 per cent.; contained added water.
24356	E. C. Putnam, Millbury, . . .	Total solids, 9.58 per cent.; fat, 2.90 per cent.; contained added water.
24359	E. C. Putnam, Millbury, . . .	Total solids, 10.52 per cent.; fat, 3.15 per cent.; contained added water.

COLD STORAGE.

Articles in Cold Storage condemned upon Physical and Chemical Examinations as Unfit for Food.

Date.	Articles.	Weight (Pounds).	Reasons.	Disposition.
May 1, 1914	Pork trimmings,	41	Decomposed,	Rendered
May 1, 1914	Chickens,	87	Decomposed,	Rendered
May 4, 1914	Oysters in shell,	3,128	Decomposed,	Rendered
May 5, 1914	Beef butts,	915	Decomposed,	Rendered
May 5, 1914	Turkeys,	145	Decomposed,	Rendered
May 9, 1914	Chickens and fowl,	245	Decomposed,	Rendered
May 9, 1914	Ducks and geese,	103	Decomposed,	Rendered
May 12, 1914	Beef trimmings,	94	Decomposed,	Incinerated
May 12, 1914	Chickens,	257	Decomposed,	Rendered
May 12, 1914	Beef tenderloins,	322	Decomposed,	Rendered
May 13, 1914	Pork trimmings,	24	Decomposed,	Rendered
May 14, 1914	Ducks,	517	Decomposed,	Rendered
May 15, 1914	Pork butts,	1,510	Decomposed,	Rendered
May 15, 1914	Fowl,	270	Decomposed,	Rendered
May 15, 1914	Miscellaneous poultry,	126	Decomposed,	Rendered
May 20, 1914	Turkeys,	235	Decomposed,	Rendered
May 22, 1914	Tautogs,	520	Tainted and decomposed.	Rendered
May 26, 1914	Chickens,	41	Decomposed,	Rendered
Total,		8,580		

Chemical Examinations of Samples of Cold-storage Goods.

Articles.	Number found to be of Good Quality.	Number found to be Unfit for Food.	Total Number of Samples examined.
Butter,	4	–	4
Pork,	–	2	2
Duck,	–	3	3
Totals,	4	5	9

SLAUGHTERING AND MEAT INSPECTION.

During the month of May, 1914, convictions were secured against the following persons because the inspector was not present at the time of slaughter, or unstamped meat was found in their possession with intent to sell: —

No.	Date.	Name of Defendant.	Place.	Result.
1	May 14, 1914	W. E. Fredericks,	Lanesborough,	Fined.
2	May 15, 1914	Herbert M. Williams,	Sturbridge,	Fined.
3	May 21, 1914	John Petrell,	Braintree,	Fined.
4	May 22, 1914	Jacob Rutman,	Southbridge,	Fined.
5	May 22, 1914	Samuel Cohen,	Sturbridge,	Case filed.
6	May 22, 1914	Samuel Cohen,	Sturbridge,	Fined.
7	May 29, 1914	Frank J. Libuda,	Southbridge,	Fined.

Total amount of fines imposed, $75.

REPORT ON INSPECTION OF DAIRIES.

During the month of May, 1914, 217 dairies were examined in the following places: —

Place.	Number examined.	Class AA.	Class A.	Class B.	Unclean Dairies.	Per Cent. Clean Dairies.
Belchertown,	11	–	–	1	10	9.09
Cheshire,	1	–	–	–	1	–
Dalton,	7	–	1	4	2	71.43
Granby,	25	–	1	4	20	20.00
Halifax,	9	–	–	3	6	33.33
Hinsdale,	13	–	–	2	11	15.38
Holyoke,	14	1	–	–	13	7.14
Hull,	4	–	–	–	4	–
Lanesborough,	25	–	–	8	17	32.00
Lenox,	10	–	–	5	5	50.00
Marion,	4	–	–	2	2	50.00
Mattapoisett,	18	–	–	1	17	5.56
Richmond,	17	–	–	10	7	58.82
South Hadley,	42	–	–	6	36	14.29
Southampton,	1	–	–	–	1	–
Stoughton,	16	–	–	3	13	18.75

Total number of dairies examined,	217
Total number of commendable dairies,	52
Total number of unclean dairies,	165
Percentage of dairies which passed inspection,	23.96

In addition to the above, 36 dairies were visited at which the sale of milk had been discontinued, 3 of which are making butter; also, 1 dairy was reported as producing less than 20 quarts of milk a day.

Included in the total number of dairies visited were 54 which had recently started in the milk-producing business and were inspected for the first time.

The names of the owners of the dairies found to be worthy of commendation follow: —

BELCHERTOWN.

Class B.

	Per Cent.
Witt, H. H.,	60

DALTON.

Class A.

Crane, Frederick E.,	81

Class B.

	Per Cent.		Per Cent.
Brown, George N.,	62½	Chamberlain, A. E.,	68½
Burgner, John A.,	61½	Loehr, Gotthardt,	61½

GRANBY.

Class A.

	Per Cent.
Ball, Charles W.,	82¼

Class B.

Cleveland, H. A.,	74	Prentiss, M. P.,	68½
Ingham, G. L.,	60	Taylor, Leon W.,	64½

HALIFAX.

Class B.

Bosworth, Daniel O.,	69½	Thompson, Austin S.,	61½
Hayward, William C.,	60		

HINSDALE.

Class B.

Robinson, Clifford E.,	60½	Watkins, M. F.,	64½

HOLYOKE.

Class AA.

	Per Cent.
Whiting, W. F.,	92½

LANESBOROUGH.

Class B.

	Per Cent.		Per Cent.
Baker, M. M.,	60½	Hurlburt, A. H.,	66
Brown, George,	61½	Miller, J. T.,	60
Desmond Brothers,	61	Talcott, G. A.,	60
Farnum & Knight,	61½	Wood, Earl,	66⅕

LENOX.

Class B.

Blake, George E.,	65	Freiderick, Jacob,	60½
Clark, Charles,	63	Sears, Chauncey,	61½
Dewey, Duane P.,	63½		

MARION.

Class B.

Dexter, Seth L.,	63	Vose, B. F.,	64

MATTAPOISETT.

Class B.

	Per Cent.
Vokes, Thomas A.,	63½

RICHMOND.

Class B.

Andrews, Charles E.,	65	Mace, C. L.,	67½
Balch, (Dr.) G. B.,	67½	Medlin, Harry,	60½
Benton, Charles,	62	Reynolds, L. A.,	62
Clark, Henry A.,	63½	Richards, A. J.,	61
Dorr, Herbert A.,	67	Walsh, D. J.,	60½

SOUTH HADLEY.

Class B.

Boynton, J. A.,	60½	Shumway, E. M.,	67½
Lyman, John E.,	63	Smith, D. I.,	62½
Remillard, A.,	62¼	Smith, Robert E.,	69

STOUGHTON.

Class B.

Curtis, Charles,	63	Sanderson, Robert,	60½
Farrington, E. F.,	60		

CLASSIFICATION OF DAIRIES.

AA = 90 to 100 per cent.
A = 75 to 90 per cent.
B = 60 to 75 per cent.
Below Class B (60 per cent.), unclean or dirty.

THE RATS OF PROVIDENCE AND THEIR PARASITES.[1]

BY GEORGE H. ROBINSON, A.M., FROM THE PROVIDENCE HEALTH DEPARTMENT AND THE BIOLOGICAL LABORATORY OF BROWN UNIVERSITY.

That rats are a factor in the spread of bubonic plague is an established fact. It has been confirmed beyond the shadow of a doubt, in India, in California, in England, and in other regions where plague is endemic. Rats dead of the disease have been found time after time in houses where outbreaks have occurred and immediate deratisation has effectively stopped further spread of the epidemic. These facts and a great amount of experimental work show that the rodent disease and that of human beings are identical.

Bubonic plague is originally a disease of rodents. Its home is thought to be the region of Thibet,[2] its natural host being the Tarbagan of that region. Other rodents are easily susceptible to the disease, as the hares of England, the ground squirrels of California, and the various species of the Muridæ found in all temperate and tropical regions of the globe. Owing to their universal distribution and great abundance the rats are to be considered as the greatest factor in the spread of bubonic plague.

When rats were first connected with the spread of the disease it was thought that they distributed the germs by contact with human food. The plague bacilli can be found in the mucous secretions, feces and urine[3] of infected rats, and so there is some evidence in support of this theory. In 1898 Simond working in India demonstrated that plague could be transmitted through the bites of fleas. Later work by the Indian Plague Commission[4] and others has shown the rat flea to be the probable distributor of the disease.

To the cities along the Atlantic coast of this country the spectre of plague is not very real, but with the outbreak of the disease in the West Indies in 1912 it took on a more than ghostly substance to those conversant with the situation. American cities have an abundance of rats; the rats are presumably well supplied with fleas, and it seemed only necessary for the introduction of the germs in order to bring about an epidemic. The Federal authorities required that all ships running between the infected region and American ports be fumigated, and advised the municipal health officers to conduct an examination of rats.

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[1] Reprinted from American Journal of Public Health, Vol. 3, No. 8.

[2] Preble, Paul, The Tarbagan (Arctomys bobac) and Plague, Public Health Reports, XXVII., 1912, 31.

[3] Baxter-Tyrie, C. C., Plague in Queensland, Journal of Hygiene, V., 1905, 315.

[4] Report of Plague Investigations in India, Journal of Hygiene, VII., 1907, 395.

In accordance with this recommendation an examination of the rats of Providence was undertaken under the direction of Dr. Charles V. Chapin, Superintendent of Health. The object of the work was to determine if possible the presence of any epizoötic among rats, the kinds of rats and the number and kinds of fleas on the rats. At first the work was confined to the water front, but later its scope was extended to the entire city.

The work began on July 18, 1912, and continued, with several short intervals, up to the last of December. From the beginning of the examination until the first of September the rats were taken in traps along the water front. A daily patrol of the shore was also made in order to pick up any which might have died. Only three were found dead. About the first of November a bounty of five cents was offered for every live rat brought to the laboratory and 142 were purchased.

The technic of the examination was as follows: the rats were caught alive in the French wire traps and carried to the laboratory; there they were placed in a reservoir of illuminating gas for several minutes, killing the rats and stupefying the fleas; the rats were then immersed in a weak solution of corrosive sublimate or formalin and left overnight; during this time the putrefactive bacteria entered the circulation, but a shorter exposure to the fluid was not sufficient to penetrate the thick fur and kill the parasites; the wet fur was then turned aside with forceps, the parasites were removed and their position on the body was recorded; the lymph glands were then exposed, the abdomen was opened and the appearance of the organs, especially the liver, was noted.

During the months July, August and September, 118 rats, and from October to January, 223, were examined, making a total of 341. These were evenly divided as to sex: 333 were the brown rat (*Mus norvegicus*), 2 were the roof rat (*Mus alexandrinus*), 1 was the black rat (*Mus rattus*), 4 were apparently crosses between the brown and roof rats, and 1 appeared to be a cross between the black and brown rats. The two specimens of the roof rat were taken from the New York–Providence boat and so were doubtless New York rats.

The size ranged from 18 to 46 c. m. (7 to 18 inches). Studying the brown rats by the biometric method we find them grouped about two distinct modes, those of 24 and 36 c. m. in length. Thus we have a clear differentiation into the adults and those which are still immature. Of these 59 per cent. were adults and 41 per cent. were young.

The results of the examination for fleas were as follows: —

Total number of rats examined,	341
Total number of rats infected with fleas,	195
Total number of fleas,	2,053
Average fleas per rat,	6
Average fleas per flea-infected rat,	11
Largest number of fleas from one rat,	300

	Per cent. of fleas.[1]
Xenopsylla cheopis Rothschild,	75.0
Ceratophyllus fasciatus Bosc,	22.0
Ctenopsyllus musculi Duges,	2.5
Ctenocephalus canis Curtis,	0.5

By way of comparison it is interesting to note that in California the average fleas per flea-infected rat was 3.5,[2] and a yearly average of 2.7 was found. In India the average fleas per rat was 4.0.[3] All who have experimented are agreed that the two most numerous species which we found, *Xenopsylla cheopis* and *Ceratophyllus fasciatus,* will bite man. Concerning the others there is some dispute, but since they comprise only 3 per cent. of all they are of little consequence.

During the plague epidemics in India and California much importance was made of the location of the primary buboes on the rats as indicating the point of inoculation or the flea bite. In India[4] 74.3 per cent. of the buboes were located in the cervical region. No data on the regional distribution of fleas on rats in India is available, but on guinea pigs artificially infected by the Commission, 88.9 per cent. of the fleas were found on the head and neck. Pound[5] in Australia reports fleas as most commonly occurring on the head and neck of rats. In San Francisco[6] 72.4 per cent. of the buboes were found in the groin and none in the cervical region, while 73 per cent. of the fleas on the rats were found on the hind quarters.

With these results in view the location of the fleas on the Providence rats was noted and the following results obtained: 16 per cent. on the head and neck, 16 per cent. on the fore legs and shoulders, 41 per cent. on the body, and 27 per cent. on the hind legs and pelvic region. These results hardly coincide with those found in other places. If we compare the relative areas of the different regions we find that they stand in about the same ratio as the percentages of fleas found on them. So it seems quite just to believe that the fleas are distributed with comparative uniformity over the body of the rat. However, with the oncome of cold weather there was noticed a slight change in position from the exposed portions of the body to the more thickly furred pectoral and pelvic regions. The exact figures were as follows: —

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[1] Acknowledgment is made of the assistance of Mr. Nathan Banks of the Bureau of Entomology in confirming the identification of the fleas.

[2] McCoy and Mitzmain, The Regional Distribution of Fleas on Rodents, Parasitology, II., 1909, 301.

[3] Seventh Report of Plague Investigations in India, Journal of Hygiene Plague Supplement, January, 1913, 217.

[4] Report of the Indian Plague Commission, Jour. of Hygiene, VII., 1907, 386.

[5] Pound, Report of Plague in Queensland, 1900–07, 143.

[6] McCoy, G. W., A Report on Laboratory Work in Relation to the Examination of Rats for Plague at San Francisco, Cal., Public Health Reports, XXIII., 1908, 1051.

	July–September (Per Cent.).	October–December (Per Cent.).
Head and neck,	15	16
Front legs and shoulders,	15	16
Body,	46	37
Hind legs and hips,	24	31

The average fleas per rat for the months July to September was 10.2 and that for October to December was 3.7, showing a marked reduction during the colder months.

Twenty-one per cent. of all the rats were found to be infected with mites, and they became more numerous with the onset of cold weather. *Lælaps echidninus* Berlese was the species found. In one case, at the Providence Coal Co. stable, a specimen of *Myonyssus decumani* Tiraboschi, said to occur on *Mus decumanus* in Italy, was found. It is interesting to note that a short while previous to the capture of its host an Italian barkentine had docked near that point. The common rat louse *Polyplax spinulosus* Burmeister was found on 24 per cent. of the specimens. On 12 per cent. were found open sores.

No numerical study of the occurrence of internal parasites was made except in cases where the liver was affected. This condition was found in 7 per cent. of the rats, and was due to the encysted form of the cat tapeworm *Tænia crassicollis* and to the ova of some unknown parasite found also by McCoy[1] in California. One noticeable and possibly significant fact is that from two meat markets from which were obtained 15 and 22 rats, respectively, both these parasites were present in the liver in 25 per cent. of each lot. A bladder worm was present in all of six cases which were examined.

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[1] McCoy, G. W., Pathological Conditions found in Rats, Public Health Reports, XXIII., 1908, 1365.

The question as to whether there is a relation between the filthiness of the home of the rat and the number of fleas is of interest. The dirty rats of the stables and docks might be expected to bear more fleas than would the cleaner rats of other localities. It was found in these investigations, however, that the average fleas per rat from the stables and docks was especially low, in but few cases exceeding one flea. On the other hand, the averages from the cleaner places were generally higher. The average from a restaurant from which 40 rats were taken was 36 fleas; that from a creamery was 22, from a dwelling house 10, from another 8, from a drygoods store 10, from a barroom 1, from two markets 1 each. The reason for this is doubtless that the fleas breed in the nests of the rats[1] and are only on the bodies of the rats to feed. So a damp, cold location of the nests would strongly inhibit the breeding of the fleas.

The conclusions from our study of the rat situation in Providence are that rats are present in large numbers and cannot be exterminated until the city is rebuilt with ratproof construction; these rodents are supplied with as many fleas as are those in plague-infected regions; opportunity for the fleas to bite human beings is always present, as the rats are for the most part closely associated with man. It would seem, therefore, that only the germs of plague are lacking to complete the mechanism of an epidemic in Providence.

TUBERCULOUS INFECTION OF CHILDREN.[2]

By Cleaveland Floyd, M.D., Boston, Director, Out-patient Clinic, Boston Consumptives' Hospital Department.

Since the conception of the campaign to suppress tuberculosis was inaugurated three distinct steps have been noticeable in its development. At first the early diagnosis of pulmonary tuberculosis was considered to be the chief aim of most of the effort put forth. The second step has been the effort directed toward an adequate provision for those suffering with the disease in its advanced form, and thirdly, the child as an important factor in the problem has slowly become recognized. Not that the early detection of the disease and provision for it are any less important, but the question of tuberculosis of childhood has become more so.

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[1] Reports on Plague Investigation in India, Journal of Hygiene, VIII., 1908, 241.

[2] Reprinted from Boston Medical and Surgical Journal, 1914.

The tuberculous child is of interest and importance chiefly from these aspects, namely, the source of and the manner in which infection takes place, the extent to which the children of the community are infected, and the influence of tuberculosis acquired in childhood upon later life.

Recent researches in the past ten years have shown that from 5 to 10 per cent. of all cases are due to infection through milk, this type generally showing itself as tuberculosis of the joints, peritoneum or glands.

With the elimination of the tuberculous cow as a source of food this source of disease will be suppressed. Hess, in a striking observation made on infants, found that a few weeks' exposure to tuberculosis gave rise in most instances to the disease. Young children are not found to have as marked a degree of susceptibility as infants, and with increasing years the intensity and duration of exposure to tuberculosis must be more marked to give rise to infection. The marked sensibility of the infant makes for a generalized tuberculosis. At an older period general glandular infection is present, and only as the child moves on toward adolescence is the localized pulmonary infection predominant.

The entrance of the tubercle bacilli into the body takes place in two ways, — through the digestive tract and by means of inhalation.

Experimental work on animals has clearly demonstrated that the organism may pass through the intestinal wall, gain access to the glands and reach the root of the lungs.

Lodgment of the bacillus in the tonsils may show subsequent inflammation of the glands of the neck with an extension into the chest.

But while the method of infection may occur from the use of tuberculous milk and the carrying into the mouth of material contaminated with the tubercle bacillus, laboratory and clinical findings still support the view that the great avenue of pulmonary infection is through direct inhalation. With the tubercle bacillus finding egress from the body chiefly from the air passages; with these secretions constantly thrown into the air, in a moist or dry state; and with the most susceptible part of the body open to the disease, it is but natural that the pulmonary tissue should be most often involved. The seat of the disease in the child may be the root of the lung and therefore not evident, except as it shows itself in symptoms of general debility.

The extent to which tuberculosis is prevalent among infants and children has been largely determined. Medin found that among 7,000 children dying from various diseases, under one year old, 10 per cent. showed tuberculosis. This proportion rapidly increases with the increasing age of the child, until at sixteen years it is very probable — as shown by laboratory and clinical methods — that very few have not become infected to some degree.

The proportion of cases among children who have come in contact with active tuberculosis in the home varies from 29 to 40 per cent. Sachs in Chicago obtained a percentage of 29. In Boston among 1,000 children so exposed, 35 per cent. showed evidence of pulmonary involvement.

The effect upon the health and life of a child infected with tuberculosis may be evident in two ways: the immediate result may be a period of poor health, consisting of anemia and lack of strength, often with recovery, but with a very slow return to robust health, which is frequently never obtained. In a much smaller number of cases the lungs may be extensively involved and the child present the picture of phthisis as commonly seen in the adult.

In a great majority of cases, therefore, in early life the tuberculous infection merely shows itself as a state of chronic ill health or general debility. With the advent of young adult life, necessitating occupation in a workshop or factory, the disease often seems to manifest itself for a second time, either through the lighting up of the old process or by an added infection from outside contact. It is probable, however, in many instances where the patient in childhood has been infected and has yet grown to be a robust adult, that this very early infection acts as a preventative in that the body is more resistant to a subsequent infection.

In those instances, also, in which a second attack of the disease occurs, the extent of its damages may be much more readily limited than would otherwise be the case.

Children who have attained adult years without having previously been infected with tuberculosis, and at this time of life are exposed to it, often seem peculiarly susceptible to its ravages. In these cases the disease seems to take the type of a general infection, often having a very malignant course, as is seen in infants. It is, therefore, probably true that some degree of immunity to tuberculosis is obtained through childhood infection, and if such children are subsequently surrounded with proper living conditions they may be well prepared to resist the disease, even if further exposed to it.

If, then, the child is ordinarily infected through direct contact with the disease in the home and the extent of tuberculosis in children so exposed is found to be a very large one, and that young adult life often succumbs to phthisis as a result of the lighting up of an early or later added infection, certain measures now more or less in general use in the effort to control tuberculosis should be re-emphasized. The susceptibility of young children even following limited periods of exposure has been so strikingly shown that measures looking toward the isolation of every active case of phthisis in a sanatorium or hospital are increasingly important.

Careful observation of all children so exposed for a period of years has proven of great value not only in the detection of the early stages of the disease but, through the building up of the under-nourished and debilitated, has prevented a latent infection from becoming evident. For about five or six years the Boston Consumptives' Hospital has had a large number of children under observation who have in the first part of this period shown tuberculosis acquired from home infection. At the present time the great majority of these children show little or nothing to indicate their former infection. Some are now young adults. I am confident that as a result of this prolonged period of care and observation they will prove to be well above the average in health in future years.

Medical inspection of school children is proving of great value, especially in arousing the interest of the parents in the health of the child. Many abnormal nose and throat conditions that lead to improper or prevent proper lung expansion are being corrected. The under-nourished child is supervised and the anemic child is examined for tuberculosis. Schoolhouse infection is being eliminated and along with it a better-fed, cleaner and more normal mass of school children is apparent.

Some of the best work being carried on in Boston is being done by the Provident Association, where families are taught hygienic living. This necessarily means cleanliness, proper preparation of food, and fresh air in the home. This work, therefore, is fundamental in that it aims to prevent, not only tuberculosis, but disease in general. I hope the time will come when it can be greatly extended.

The recent child labor law in this State will in time undoubtedly make for better health among children and is worthy of cordial support.

If, then, we surround the child who has been exposed to tuberculosis in the susceptible years of life with healthful conditions in the home, healthful conditions of study, and if we prevent its early entrance into the confinement of factory or workshop life and do this on a sufficiently large scale, we have the solution of the problem of the tuberculous child in our hands.

THE SOCIAL WORKER'S EDUCATIONAL INFLUENCE IN THE COMMUNITY.[1]

By George B. Underwood, M.D., Gardner, Mass., President, Gardner Association for the Relief and Control of Tuberculosis.

Before speaking of the educational influence of a social worker in the community, might it not be well to consider for one moment what social work really is? One authority defines social work as "the study of character under adversity and of the influences that mold it for good or ill." Another says that "it is the making the best of what sound life or character there is left, also its ideals are public health and the extermination of disease."

The campaign of the social worker in Gardner is not directed against all poverty and distress, much of which comes under the province of the Associated Charities, the District Nurse, and the Overseers of the Poor, but is a campaign of education as directed to the tubercular patient, their families, and such associates as are brought into direct or constant relation with the tubercular patient. The work naturally focuses first on an active guidance of the tubercular patient, that he may make the best use of such resources as he has toward recovery; and then toward the education of his immediate family and associates, with the idea of preventing the further spread of the disease.

Hence, the position of the social worker is really that of teacher, as Dr. Cabot says, "One who needs all the virtues, no more and no less than the railroad man, the farmer, or the shopkeeper. But his first and chief duty to all men is to give, with such ripening sympathy and friendliness as is possible under the circumstances, the benefit of his expert skill, and so fulfill his special function in the community." Besides natural versatility and tact, the work requires a fund of experience and a professional knowledge gained from a rigorous training.

Her experience and training must be varied, for the sympathetic nature which is absolutely essential must be supplemented with a practical business training. In one family she has to teach the wage earner to plan the expenditure of his small income in such a way that necessities may be provided for his family, and again a mother must be taught the art of cooking to tempt the appetite of the patient; others need direction in the methods of housekeeping, so that the patient may be surrounded by as sanitary and comfortable conditions as possible.

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[1] Reprinted from Boston Medical and Surgical Journal, 1914.

She must have a wide acquaintance with the business men and people of wealth in the community, whose confidence she must have gained, — business men, because of the dependence upon them in securing employment for those who need suitable work, and people of wealth, because of their assistance in supplying funds, with which to buy necessities and comforts for the destitute. Constant vigilance and oversight is the keynote of the work.

One not familiar with the work would hardly appreciate the far-reaching influence of the social worker. Her frequent visits to a home bring her in contact with the well members of the family whom she interests in the condition of the patient, and who thus become educated in methods of prevention of diseases as well as methods of treatment. In her numerous visits to the home she may find another member of the family in a state of malnutrition, anemia, or debility. She sends the person to the clinic or family physician for examination. No definite signs of tuberculosis are found, but with a little treatment to build him up and increase his resistance the patient is rendered less liable to the contraction and development of phthisis. This work the Association believes to be of great value.

To illustrate more vividly the influence of the social worker, let us picture an ordinary working man, from thirty to forty-five years of age, who feels the full responsibility of a family from four to seven, dependent for their sustenance upon his daily work. For some time this man has felt tired, and some nights completely played out; has been subject to frequent colds, as he thinks, naturally attended with more or less cough.

Let us now imagine this man in the office of a good physician, who has been sufficiently interested in his case to have made one or more careful examinations and to have learned personal history, and who, although he has been reasonably certain of his diagnosis of tuberculosis, has just found a positive sputum.

The physician, knowing the poor home conditions and that at the present time only a small proportion of tubercular cases can be treated at our State sanatoria, is fortunate to have at his command an efficient social worker to see that his instructions and treatment are properly followed.

The physician explains with confidence to the disheartened man that the social worker will prove an important factor in his recovery; that she will teach him not only what he can do to be of the greatest benefit to himself, but also how to avoid being a source of contagion to other members of the family; for although the physician prescribes, it is the social worker who carries out the detail of management.

The next day the social worker, having been asked by the physician to visit the patient, finds the unfortunate man thoroughly discouraged and helpless. The grief that he feels for his needy family and the hopeless outlook into the future render him an abject figure.

The social worker enters, and on her first visit establishes a bond of sympathy and confidence. She talks with him about the instructions of the physician, the necessary rest, the exercise, his food, the care of sputum, the absolute necessity of plenty of fresh air, open windows, sitting out of doors, etc., much of which seemed impossible to him as he sat in the doctor's office and thought of the lack of warm clothing and other means with which to carry out these instructions.

The social worker assures him that she can easily obtain a chair for him and plenty of warm clothing; she knows women ready and glad to sew and provide clothing for his children. So the cloud begins to lift. The confidence which the social worker inspires arouses hope, and with new encouragement the patient is better able to begin his battle.

It is usually at this stage that the patient with tuberculosis is the hardest to control. Oftentimes not feeling very sick, in the ordinary understanding of the term, he is inclined to wander. It is now that the frequent visits ot the social worker are of greatest importance. She must be alert, earnest, convincing, and ready to correct repeated doubts the patient may have in relation to his treatment. It is now that she strengthens faith in his physician and prevents his going about from doctor to doctor in search of immediate cure.

A person but slightly ill is sometimes somewhat feeble-minded and suffers from tricks of memory with regard to the instructions and advice of the physician. In this case the patient needs constant supervision and instruction, which the physician is unable to give, but which the social worker can supply.

As I have said before, it is the incipient case which benefits most from the supervision of the social worker. A person acutely sick usually suffers pain or some distress which urges him to seek help as soon as possible. The incipient case of tuberculosis does not feel this urgent demand for relief. He may have more or less cough, suffer loss of weight and appetite, and have the sensation of general loss of strength and debility, but with proper treatment have very little to complain about.

It is in such a situation that the patience of the social worker is taxed, for she must visit the patient frequently, see that every detail of treatment is properly carried out, and continually encourage, so that he will make the necessary effort to secure a permanent result.

Now when the patient is told and fully realizes that he has tuberculosis, his mental attitude toward the whole situation may be likened to the young man going into battle for the first time. He would run away from the enemy were it not for the watchful eye and moral support of his commanding officer. Just so does the continual moral support of the social worker bring back the confidence and add new courage to successfully arrest and overcome the disease.

The work of the social worker, viewed from the economic standpoint rather than the humanitarian, is of great benefit to the State. If it were not for her supervision of patients returned from sanatoria the large amounts of money expended in sanatorium treatment would in many cases be practically wasted, for it is a recognized fact that, unless followed up, many patients would not continue the necessary treatment at home, and were it not for the constant vigilance and supervision of the social worker a recurrence of the disease would be sure to result. Hence, the sum expended in the treatment of the patient at the sanatorium might prove to be a loss to the State, for the patient again may soon return to his former condition.

In all this work vain indeed would be the efforts of the social worker if she had not an advisor in the person of a good physician who is entirely in sympathy with her work, understands her needs, and is ever ready to counsel and help her in the many perplexities which are sure to arise. Without this co-operation failure must follow where success would otherwise be attained.

Some may question, Why bother with this home treatment when our State supports institutions so well equipped for the express purpose of caring for patients? Why incur the expense of salary of a social worker and maintenance of a dispensary? The social worker watches carefully those patients who have returned from sanatoria, and sends them to the dispensary or their own private doctor for examination, especially when they are taking up their work again. She follows carefully those who are waiting to go to sanatoria, and if the waiting seems long encourages them to be patient, and in the meanwhile helps them at home as much as possible.

There is a certain class of patients who do better under careful supervision at home. These cases are usually in those persons who suffer from homesickness. Take, for instance, a homesick person, often depressed because of his condition, and place him in a sanatorium where there are others afflicted as he is, and he is overcome with a sense of loneliness and homesickness. This class of cases needs the sympathy and encouragement of relatives and friends. When the patient returns from a sanatorium he finds that the arrangement of his time has to be planned on a new basis. In adjusting himself to this new régime, the advice and moral support of the social worker is indispensable.

In Gardner an anti-tuberculosis dispensary was established in 1909. This was earnestly and actively opposed by the physicians of the town, who in common with doctors throughout the State at that time did not appreciate the importance of the diagnosis of incipient cases.

In 1910 the local social worker began her duties, and she was instructed to call on the physicians and see if she could help them in any tubercular case they happened to have under observation. This plan worked so well that within a few months the physicians, seeing that the dispensary did not detract work from their offices, showed an entirely different attitude; opposition ceased, new interest was aroused, and confidence and co-operation followed. This is evident from the fact that during the first three months after the social worker commenced her duties, and the dispensary was moved to the board of health office, 40 new cases were reported.

Since its establishment, 73 cases have been sent to sanatoria, 17 of whom have died, 4 of these having died of other diseases than tuberculosis. Of the remainder, 47 are working full time, 8 part of the time, and 1 is unable to work at all. Since 1908, 232 cases have been reported. Most of these the social worker calls upon in the interest of the attending physician or the dispensary.

Not wishing to detract from the benefits derived from sanatoria or local hospital, we wish to emphasize the effort to put more efficient social workers throughout every community in the State. We feel that as much effort should be made to put as many social workers in the field as is put into building new sanatoria, as they both are essential in the management and care of the tubercular patient.

The social worker does much to correct the mistaken ideas of the public, who sometimes practically ostracize the tubercular patient. The social worker should strive to accomplish her ends by tact, constant attention, and friendliness, rather than by making her directions compulsory and thereby creating a feeling of antagonism to her work.

That the social worker is a most important influence in a community cannot be denied, and that her influence is educational is recognized, for as Dr. Cabot says, "The contagion of disease must be opposed by a contagion of intelligence."

NEW LEGISLATION.

Acts of 1914, Chapter 484.

An Act relative to the analyzing of intoxicating liquors.

Section 1. The state board of health shall hereafter analyze all samples of intoxicating liquors submitted to it for that purpose by any licensing authority, board of health, or police department of any city or town. Such analysis shall be made for the purpose of ascertaining the presence of any poisons, drugs or other substances dangerous to health.

Section 2. This act shall take effect upon its passage. [*Approved May 5, 1914.*

Acts of 1914, Chapter 545.

An Act relative to the sale of eggs taken from cold storage.

Section one of chapter five hundred and thirty-eight of the acts of the year nineteen hundred and thirteen is hereby amended by inserting after the word "at", in the second line, the words: — wholesale or, — by striking out the words "at retail", in the thirteenth line, and by inserting after the word "act", in the sixteenth line, the words: — shall be in letters not less than one inch in height and, — so as to read as follows: — *Section 1.* Whenever eggs that have been in cold storage are sold at wholesale or retail, or offered or exposed for sale, the basket, box or other container in which the eggs are placed shall be marked plainly and conspicuously with the words "cold storage eggs", or there shall be attached to such container a placard or sign having on it the said words. If eggs that have been in cold storage are sold at retail or offered or exposed for sale without a container, or placed upon a counter or elsewhere, a sign or placard, having the words "cold storage eggs" plainly and conspicuously marked upon it, shall be displayed in, upon or immediately above the said eggs; the intent of this act being that cold storage eggs sold or offered or exposed for sale shall be designated in such a manner that the purchaser will know that they are cold storage eggs. The display of the words "cold storage eggs", as required by this act, shall be in letters not less than one inch in height and shall be done in such a manner as is approved by the state board of health. [*Approved May 20, 1914.*

ACTS OF 1914, CHAPTER 583.

AN ACT RELATIVE TO THE LOCATION OF HOSPITALS.

SECTION 1. Section thirty-seven of chapter seventy-five of the Revised Laws, which provides that no hospital shall be established within one hundred rods of an inhabited dwelling house situated in an adjoining city or town, without the consent of such city or town, is hereby repealed.

SECTION 2. This act shall take effect upon its passage. [*Approved May 29, 1914.*

ACTS OF 1914, CHAPTER 627.

AN ACT RELATIVE TO THE INSPECTION BY BOARDS OF HEALTH OF ARTICLES OF FOOD AND TO REGULATIONS FOR THE SALE OF THE SAME.

Section seventy of chapter fifty-six of the Revised Laws, as amended by section one of chapter four hundred and eleven of the acts of the year nineteen hundred and eight, and by chapter four hundred and forty-eight of the acts of the year nineteen hundred and twelve, is hereby further amended by adding at the end of said section the following: — No regulation adopted in accordance with this act, shall be construed as preventing the exposure of food articles for sale at retail in the Boston "market limits", as defined in the ordinances of the city of Boston of the year eighteen hundred and ninety-eight, on Saturdays or the day immediately preceding any holiday observed in Boston, but no area in said "market limits" where food articles are not at the time of the passage of this act exposed for sale at retail on these days shall be occupied for the exposure of food articles without a permit from the board of health. Whoever violates any rule or regulation of a board of health of a city or town approved by the state board of health shall be punished by a fine of not more than one hundred dollars, — so as to read as follows: — *Section 70.* Boards of health of cities and towns, by themselves, their officers or agents, may inspect the carcasses of all slaughtered animals and all meat, fish, vegetables, produce, fruit or provisions of any kind found in their cities or towns, and for such purpose may enter any building, enclosure or other place in which such carcasses or articles are stored, kept or exposed for sale. If, on such inspection, it is found that such carcasses or articles are tainted, diseased, corrupted, decayed, unwholesome or, from any cause, unfit for food, the board of health shall seize the same and cause it or them to be destroyed forthwith or disposed of otherwise than for food. All money received by the board of health for property disposed of as aforesaid shall, after deducting the expenses of said seizure, be paid to the owner of such property. If the board of health seizes or condemns any such carcass or meat for the reason that it is affected with a contagious disease, it shall immediately give notice to the board of cattle commissioners of the name of the owner or person in whose possession it was found, the nature of the disease and the disposition made of said meat or carcass.

Boards of health of cities and towns may make and enforce reasonable rules and regulations, subject to the approval of the state board of health, as to the conditions under which all articles of food may be kept for sale or exposed for sale, in order to prevent contamination thereof and injury to the public health. Before the board of health of any city or town submits such rules and regulations to the state board of health for approval it shall hold a public hearing thereon, of which notice shall be given by publication for two successive weeks, the first publication to be at least fourteen days prior to the date of the hearing, in a newspaper published in such city or town, or, if none is so published, in a newspaper published in the county in which such city or town is located. Any person affected by such rules and regulations, in the form in which they are presented to the state board of health for approval, may appeal to the said board for a further hearing, and said board shall not grant its approval to rules and regulations concerning which such an appeal has been taken until it has held a public hearing thereon, advertised in the manner specified above in this section with reference to hearings before boards of health in cities and towns. No regulation adopted in accordance with this act, shall be construed as preventing the exposure of food articles for sale at retail in the Boston "market limits", as defined in the ordinances of the city of Boston of the year eighteen hundred and ninety-eight, on Saturdays or the day immediately preceding any holiday observed in Boston, but no area in said "market limits" where food articles are not at the time of the passage of this act exposed for sale at retail on these days shall be occupied for the exposure of food articles without a permit from the board of health. Whoever violates any rule or regulation of a board of health of a city or town approved by the state board of health shall be punished by a fine of not more than one hundred dollars. [*Approved June 6, 1914.*

ACTS OF 1914, CHAPTER 634.

AN ACT RELATIVE TO THE SALE OF SAUSAGE MEAT.

SECTION 1. For the purposes of this act, sausage or sausage meat is defined to be a comminuted meat from neat cattle, swine or veal, or a mixture of such meats, either fresh, salted, pickled or smoked, with or without added salt and spices, and cereal and the like, as provided hereinafter, and with or without the addition of edible animal fats, blood and sugar, or subsequent smoking.

SECTION 2. For the purposes of this act, sausage shall be deemed to be adulterated: —

First. If it contains any cereal or vegetable flour or any product thereof in excess of two per cent;

Second. If it contains any coloring matter, or any substance injurious or deleterious to health;

Third. If it contains water in excess of an amount sufficient to make the product palatable and to facilitate mixing and placing in casings;

Fourth. If it contains, except as a casing, the stomach or intestines or entrails, or any part thereof, except hearts, tripe and liver;

Fifth. If it contains any diseased, contaminated, filthy or decomposed substance; or if it is manufactured, in whole or in part from, or contains a substance produced, stored, transported or kept in a way or manner that would render the article diseased, contaminated or unwholesome; or if it is the product of a diseased animal or the product of any animal which has died otherwise than by slaughter.

Section 3. It shall be unlawful to sell or offer or expose for sale sausage manufactured contrary to the provisions of this act or adulterated within the meaning of this act.

Section 4. Whoever violates any provision of this act shall be punished by a fine of not more than one hundred dollars for each offence.

Section 5. Section nine of chapter two hundred and thirteen of the Revised Laws, as amended by chapter six hundred and fifty of the acts of the year nineteen hundred and thirteen, and said chapter six hundred and fifty are hereby repealed; but this repeal shall not affect any suit or other proceeding now pending or any liability or penalty already incurred. [*Approved June 6, 1914.*

Acts of 1914, Chapter 647.

An Act relative to inspection by the state board of health of all hospitals caring for diseases dangerous to the public health.

Section 1. Section thirty-five of chapter seventy-five of the Revised Laws, as amended by chapter six hundred and thirteen of the acts of the year nineteen hundred and eleven, and by chapter one hundred and fifty-one of the acts of the year nineteen hundred and twelve, is hereby further amended by inserting after the word "hospitals", in the twenty-first line, the words: — and of all other hospitals, sanitaria, asylums, homes, prisons and dispensaries, both public and private, caring for diseases dangerous to the public health, — and also by inserting after the word "necessary", in the twenty-second line, the following: — and report as to the condition and needs of such hospitals, sanitaria, asylums, homes, prisons and dispensaries, to those responsible for the management of the said institutions, — so that the third sentence of the said section will read as follows: — Plans for the construction of the said hospitals shall be approved by the state board of health, before the hospitals are constructed, and the state inspectors of health shall annually make such examination of said hospitals, and of all other hospitals, sanitaria, asylums, homes, prisons and dispensaries, both public and private, caring for diseases dangerous to the public health, as in the opinion of the state board of health may be necessary, and report as to the condition and needs of such hospitals, sanitaria, asylums, homes, prisons and dispensaries, to those responsible for the management of the said institutions.

Section 2. This act shall take effect upon its passage. [*Approved June 9, 1914.*

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OF

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Approved by
The State Board of Publication.

RETURNS OF DISEASES.

CASES OF DISEASES DECLARED BY THE STATE BOARD OF HEALTH TO BE DANGEROUS TO THE PUBLIC HEALTH.

[Under the provisions of section 52 of chapter 75 of the Revised Laws.]

DISEASE.	WEEK ENDING —				
	June 6.	June 13.	June 20.	June 27.	Total.
Diphtheria,	128	90	127	131	476
Measles,	563	372	400	317	1,652
Scarlet fever,	223	211	147	152	733
Typhoid fever,	25	31	22	37	115
Tuberculosis, pulmonary,	163	176	160	144	643
Tuberculosis, meningitis,	8	8	3	12	31
Tuberculosis, other forms,	10	8	11	3	32
Cerebro-spinal meningitis,	4	4	6	5	19
Whooping cough,	71	77	50	59	257
Varicella,	136	72	75	68	351
Ophthalmia neonatorum,	45	48	41	48	182
Anterior poliomyelitis,	–	3	1	5	9
Smallpox,	–	–	2	2	4
Trachoma,	1	1	2	2	6
Trichinosis,	1	–	–	–	1
Tetanus,	2	–	–	–	2
Typhus fever,	–	2	–	–	2

CASES OF INFECTIOUS DISEASES NOT INCLUDED IN THE ABOVE TABLE.

[Cases not notifiable under the privisions of section 52 of chapter 75 of the Revised Laws.]

DISEASE.	WEEK ENDING —				
	June 6.	June 13.	June 20.	June 27.	Total.
Mumps,	5	11	3	6	25
Erysipelas,	1	1	–	1	3

RETURNS OF DEATHS.

DEATHS FROM DISEASES DECLARED BY THE STATE BOARD OF HEALTH TO BE DANGEROUS TO THE PUBLIC HEALTH IN CITIES AND TOWNS OF MORE THAN 10,000 POPULATION.

[Under the provisions of chapter 210, Acts of 1913.]

Week ending June 6, 1914.

CITIES AND TOWNS.	Population. Census for 1910.	Total Number reported.	Tuberculosis, Pulmonary (or not classified).	Tuberculous Meningitis.	Tuberculosis, Other Forms.	Diphtheria.	Typhoid Fever.	Scarlet Fever.	Measles.	Whooping Cough.	Cerebro-spinal Meningitis.
Boston,	686,092	31[3] 34[4]	17[1] 19[2]	5[1] 5[2]	1[1] 1[2]	2[1] 2[2]	2[1] 2[2]	1[1] 2[2]	1[1] 1[2]	– –	1[1] 1[2]
Worcester,	145,986	6	5	–	–	–	–	–	1	–	–
Fall River,	119,295	7	5	–	–	–	–	–	–	2	–
Lowell,	106,294	5	5	–	–	–	–	–	–	–	–
Cambridge,	104,839	5	4	–	1	–	–	–	–	–	–
New Bedford,	96,652	7	5	1	–	1	–	–	–	–	–
Lynn,	89,336	2	2	–	–	–	–	–	–	–	–
Springfield,	88,926	3	2	–	–	–	–	–	1	–	–
Lawrence,	85,892	–	–	–	–	–	–	–	–	–	–
Somerville,	77,236	5	2	–	–	2	–	1	–	–	–
Holyoke,	57,730	–	–	–	–	–	–	–	–	–	–
Brockton,	56,878	1	1	–	–	–	–	–	–	–	–
Malden,	44,404	2	1	–	–	1	–	–	–	–	–
Haverhill,	44,115	2	1	–	1	–	–	–	–	–	–
Salem,	43,697	–	–	–	–	–	–	–	–	–	–
Newton,	39,806	1	–	–	–	–	–	1	–	–	–
Fitchburg,	37,826	1	1	–	–	–	–	–	–	–	–
Taunton,	34,259	2	1	–	1	–	–	–	–	–	–
Everett,	33,484	1	1	–	–	–	–	–	–	–	–
Quincy,	32,642	–	–	–	–	–	–	–	–	–	–
Chelsea,	32,452	–	–	–	–	–	–	–	–	–	–
Pittsfield,	32,121	5[5]	3	–	–	1	–	–	–	–	–
Waltham,	27,834	1	1	–	–	–	–	–	–	–	–
Brookline,	27,792	–	–	–	–	–	–	–	–	–	–
Chicopee,	25,401	3	2	–	–	1	–	–	–	–	–
Gloucester,	24,398	–	–	–	–	–	–	–	–	–	–
Medford,	23,150	–	–	–	–	–	–	–	–	–	–
North Adams,	22,019	1	–	–	1	–	–	–	–	–	–
Northampton,	19,431	2[4]	1	–	–	–	–	–	–	–	–
Beverly,	18,650	–	–	–	–	–	–	–	–	–	–
Revere,	18,219	–	–	–	–	–	–	–	–	–	–
Leominster,	17,580	–	–	–	–	–	–	–	–	–	–
Attleborough,	16,215	–	–	–	–	–	–	–	–	–	–
Westfield,	16,044	–[1] 3	–[1] 3	– –	– –	– –	– –	– –	– –	– –	– –
Peabody,	15,721	–	–	–	–	–	–	–	–	–	–
Melrose,	15,715	–	–	–	–	–	–	–	–	–	–
Woburn,	15,308	–	–	–	–	–	–	–	–	–	–
Newburyport,	14,949	1	–	1	–	–	–	–	–	–	–
Gardner,	14,699	–	–	–	–	–	–	–	–	–	–
Marlborough,	14,579	–	–	–	–	–	–	–	–	–	–
Clinton,	13,075	2	1	–	–	1	–	–	–	–	–
Milford,	13,055	–	–	–	–	–	–	–	–	–	–
Adams,	13,026	2	2	–	–	–	–	–	–	–	–
Framingham,	12,948	1	–	1	–	–	–	–	–	–	–
Weymouth,	12,895	–	–	–	–	–	–	–	–	–	–
Watertown,	12,875	–	–	–	–	–	–	–	–	–	–
Southbridge,	12,592	1	1	–	–	–	–	–	–	–	–
Plymouth,	12,141	–	–	–	–	–	–	–	–	–	–
Webster,	11,509	–	–	–	–	–	–	–	–	–	–
Methuen,	11,448	–	–	–	–	–	–	–	–	–	–
Wakefield,	11,404	1	1	–	–	–	–	–	–	–	–
Arlington,	11,187	1	–	–	–	–	–	–	1	–	–
Greenfield,	10,427	–	–	–	–	–	–	–	–	–	–
Winthrop,	10,132	–	–	–	–	–	–	–	–	–	–
Total of reporting towns,	2,037,459	108	70	8	5	9	2	4	4	2	1

---

[1] Nonresidents deducted.

[2] Total deaths.

[3] Nonresidents deducted: one death from pellagra.

[4] Total deaths: one death from pellagra.

[5] One death from tetanus.

Week ending June 13, 1914.

CITIES AND TOWNS.	Population. Census for 1910.	Total Number reported.	Tuberculosis, Pulmonary (or not classified).	Tuberculous Meningitis.	Tuberculosis, Other Forms.	Diphtheria.	Typhoid Fever.	Scarlet Fever.	Measles.	Whooping Cough.	Cerebro-spinal Meningitis.
Boston, ...	686,092	31[3] 34[4]	23[1] 24[2]	3[1] 5[2]	1[1] 1[2]	1[1] 1[2]	1[1] 1[2]	– –	1[1] 1[2]	– –	– –
Worcester, ...	145,986	10	5	–	1	–	–	–	4	–	–
Fall River, ...	119,295	4[5]	2	–	–	–	–	1	–	–	–
Lowell, ...	106,294	3	2	1	–	–	–	–	–	–	–
Cambridge, ...	104,839	9	7	1	–	–	–	–	–	1	–
New Bedford, ...	96,652	2	2	–	–	–	–	–	–	–	–
Lynn, ...	89,336	4	2	–	–	1	1	–	–	–	–
Springfield, ...	88,926	–	–	–	–	–	–	–	–	–	–
Lawrence, ...	85,892	–	–	–	–	–	–	–	–	–	–
Somerville, ...	77,236	3	1	1	–	1	–	–	–	–	–
Holyoke, ...	57,730	1	1	–	–	–	–	–	–	–	–
Brockton, ...	56,878	2	–	–	2	–	–	–	–	–	–
Malden, ...	44,404	2	1	1	–	–	–	–	–	–	–
Haverhill, ...	44,115	4	1	–	1	1	–	–	–	–	1
Salem, ...	43,697	–	–	–	–	–	–	–	–	–	–
Newton, ...	39,806	1	1	–	–	–	–	–	–	–	–
Fitchburg, ...	37,826	1	–	–	–	1	–	–	–	–	–
Taunton, ...	34,259	2	1	–	–	–	–	1	–	–	–
Everett, ...	33,484	–	–	–	–	–	–	–	–	–	–
Quincy, ...	32,642	–	–	–	–	–	–	–	–	–	–
Chelsea, ...	32,452	–	–	–	–	–	–	–	–	–	–
Pittsfield, ...	32,121	2	1	–	–	–	–	–	–	–	1
Waltham, ...	27,834	–	–	–	–	–	–	–	–	–	–
Brookline, ...	27,792	–	–	–	–	–	–	–	–	–	–
Chicopee, ...	25,401	2	1	–	–	–	–	1	–	–	–
Gloucester, ...	24,398	–	–	–	–	–	–	–	–	–	–
Medford, ...	23,150	–	–	–	–	–	–	–	–	–	–
North Adams, ...	22,019	–	–	–	–	–	–	–	–	–	–
Northampton, ...	19,431	1	–	–	1	–	–	–	–	–	–
Beverly, ...	18,650	–	–	–	–	–	–	–	–	–	–
Revere, ...	18,219	–	–	–	–	–	–	–	–	–	–
Leominster, ...	17,580	–	–	–	–	–	–	–	–	–	–
Attleborough, ...	16,215	1	1	–	–	–	–	–	–	–	–
Westfield, ...	16,044	–	–	–	–	–	–	–	–	–	–
Peabody, ...	15,721	–	–	–	–	–	–	–	–	–	–
Melrose, ...	15,715	1	–	–	1	–	–	–	–	–	–
Woburn, ...	15,308	–	–	–	–	–	–	–	–	–	–
Newburyport, ...	14,949	–	–	–	–	–	–	–	–	–	–
Gardner, ...	14,699	–	–	–	–	–	–	–	–	–	–
Marlborough, ...	14,579	–	–	–	–	–	–	–	–	–	–
Clinton, ...	13,075	–	–	–	–	–	–	–	–	–	–
Milford, ...	13,055	–	–	–	–	–	–	–	–	–	–
Adams, ...	13,026	–	–	–	–	–	–	–	–	–	–
Framingham, ...	12,948	–	–	–	–	–	–	–	–	–	–
Weymouth, ...	12,895	–	–	–	–	–	–	–	–	–	–
Watertown, ...	12,875	–	–	–	–	–	–	–	–	–	–
Southbridge, ...	12,592	–	–	–	–	–	–	–	–	–	–
Plymouth, ...	12,141	–	–	–	–	–	–	–	–	–	–
Webster, ...	11,509	–	–	–	–	–	–	–	–	–	–
Methuen, ...	11,448	–	–	–	–	–	–	–	–	–	–
Wakefield, ...	11,404	–	–	–	–	–	–	–	–	–	–
Arlington, ...	11,187	1	–	–	–	–	–	–	–	–	1
Greenfield, ...	10,427	–	–	–	–	–	–	–	–	–	–
Winthrop, ...	10,132	–	–	–	–	–	–	–	–	–	–
Total of reporting towns, . .	1,860,818	90	53	9	7	5	2	3	5	1	3

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[1] Nonresidents deducted.

[2] Total deaths.

[3] Nonresidents deducted: one death from pellagra.

[4] Total deaths: one death from pellagra.

[5] One death from ophthalmia neonatorum.

Week ending June 20, 1914.

CITIES AND TOWNS.	Population. Census for 1910.	Total Number reported.	Tuberculosis, Pulmonary (or not classified).	Tuberculous Meningitis.	Tuberculosis, Other Forms.	Diphtheria.	Typhoid Fever.	Scarlet Fever.	Measles.	Whooping Cough.	Cerebro-spinal Meningitis.
Boston, ...	686,092	27[1] 29[3]	17[1] 18[2]	– –	2[1] 2[2]	2[1] 2[2]	1[1] 1[2]	– –	2[1] 2[2]	1[1] 1[2]	2[1] 2[2]
Worcester, ...	145,986	11	8	1	–	–	–	–	2	–	–
Fall River, ...	119,295	6	5	–	1	–	–	–	–	–	–
Lowell, ...	106,294	3	1	1	1	–	–	–	–	–	–
Cambridge, ...	104,839	4	2	1	–	1	–	–	–	–	–
New Bedford, ...	96,652	4	2	–	–	–	–	2	–	–	–
Lynn, ...	89,336	3	2	–	1	–	–	–	–	–	–
Springfield, ...	88,926	3	–	–	1	–	–	–	2	–	–
Lawrence, ...	85,892	–	–	–	–	–	–	–	–	–	–
Somerville, ...	77,236	5	3	–	–	2	–	–	–	–	–
Holyoke, ...	57,730	3	2	–	1	–	–	–	–	–	–
Brockton, ...	56,878	–	–	–	–	–	–	–	–	–	–
Malden, ...	44,404	1	–	–	–	–	–	1	–	–	–
Haverhill, ...	44,115	1[4]	–	–	–	–	–	–	–	–	–
Salem, ...	43,697	–	–	–	–	–	–	–	–	–	–
Newton, ...	39,806	2	1	–	–	1	–	–	–	–	–
Fitchburg, ...	37,826	–	–	–	–	–	–	–	–	–	–
Taunton, ...	34,259	2	1	1	–	–	–	–	–	–	–
Everett, ...	33,484	1	1	–	–	–	–	–	–	–	–
Quincy, ...	32,642	–	–	–	–	–	–	–	–	–	–
Chelsea, ...	32,452	1	1	–	–	–	–	–	–	–	–
Pittsfield, ...	32,121	2	2	–	–	–	–	–	–	–	–
Waltham, ...	27,834	–	–	–	–	–	–	–	–	–	–
Brookline, ...	27,792	–	–	–	–	–	–	–	–	–	–
Chicopee, ...	25,401	–	–	–	–	–	–	–	–	–	–
Gloucester, ...	24,398	–	–	–	–	–	–	–	–	–	–
Medford, ...	23,150	–	–	–	–	–	–	–	–	–	–
North Adams, ...	22,019	1	–	–	–	–	–	–	–	1	–
Northampton, ...	19,431	1	–	–	–	–	–	–	–	–	1
Beverly, ...	18,650	–	–	–	–	–	–	–	–	–	–
Revere, ...	18,219	–	–	–	–	–	–	–	–	–	–
Leominster, ...	17,580	2	1	–	–	1	–	–	–	–	–
Attleborough, ...	16,215	–	–	–	–	–	–	–	–	–	–
Westfield, ...	16,044	3	3	–	–	–	–	–	–	–	–
Peabody, ...	15,721	–	–	–	–	–	–	–	–	–	–
Melrose, ...	15,715	–	–	–	–	–	–	–	–	–	–
Woburn, ...	15,308	–	–	–	–	–	–	–	–	–	–
Newburyport, ...	14,949	1	1	–	–	–	–	–	–	–	–
Gardner, ...	14,699	–	–	–	–	–	–	–	–	–	–
Marlborough, ...	14,579	–	–	–	–	–	–	–	–	–	–
Clinton, ...	13,075	–	–	–	–	–	–	–	–	–	–
Milford, ...	13,055	–	–	–	–	–	–	–	–	–	–
Adams, ...	13,026	–	–	–	–	–	–	–	–	–	–
Framingham, ...	12,948	–	–	–	–	–	–	–	–	–	–
Weymouth, ...	12,895	–	–	–	–	–	–	–	–	–	–
Watertown, ...	12,875	–	–	–	–	–	–	–	–	–	–
Southbridge, ...	12,592	–	–	–	–	–	–	–	–	–	–
Plymouth, ...	12,141	–	–	–	–	–	–	–	–	–	–
Webster, ...	11,509	–	–	–	–	–	–	–	–	–	–
Methuen, ...	11,448	–	–	–	–	–	–	–	–	–	–
Wakefield, ...	11,404	–	–	–	–	–	–	–	–	–	–
Arlington, ...	11,187	–	–	–	–	–	–	–	–	–	–
Greenfield, ...	10,427	–	–	–	–	–	–	–	–	–	–
Winthrop, ...	10,132	–	–	–	–	–	–	–	–	–	–
Total of reporting towns, . .	1,923,050	89	54	4	7	7	1	3	6	2	3

[1] Nonresidents deducted.

[2] Total deaths.

[3] Total deaths: one death from tetanus.

[4] One death from anterior poliomyelitis.

Summary of Analyses — Concluded.

ARTICLES EXAMINED.	Number found to be of Good Quality.	Number adulterated or varying from the Legal Standard.	Total.
Jams and jellies,	7	1	8
Lard,	1	–	1
Maple sugar,	4	3	7
Maple syrup,	1	–	1
Meat product: —			
Hamburg steak,	–	1	1
Milk,	453	117	570
Olive oil,	1	–	1
Proprietary foods,	1	–	1
Root beer extract,	2	–	2
Salad dressing,	3	–	3
Shrimp,	4	1	5
Soft drinks,	3	1	4
Spices,	3	–	3
Syrups,	5	–	5
Wine,	1	–	1
Totals,	872	199	1,071

PROSECUTIONS FOR VIOLATIONS OF THE LAW RELATING TO FOOD AND DRUGS.

Ten convictions were secured during the month of June, 1914, for selling adulterated food and drugs, as follows: —

No.	NAME OF DEFENDANT.	Place.	Character of Article sold.
1	O. G. Seeley,	Lexington,	Essence peppermint (not U. S. P.).
2	George E. Triantafel,	Boston,	Kisses (contained paraffin).[1]
3	George E. Triantafel,	Boston,	Maple sugar (70 per cent. cane sugar).[1]
4	Peter Statuto,	Lowell,	Maple sugar (90 per cent. cane sugar).
5	Charles G. Day,	Ipswich,	Milk (total solids, 11.24).[2]
6	Manuel J. Avilla,	Lowell,	Milk (total solids, 7.88).[1], [2]
7	William Tomkins,	Marlboro,	Milk (total solids, 9.40).[2]
8	John C. Moynihan,	Newburyport,	Milk (total solids, 8.04).[2], [3]
9	John H. Fitzgerald,	Cambridge,	Spirit of nitrous ether (not U. S. P.).[1]
10	William R. Canfield,	Medford,	Spirit of nitrous ether (not U. S. P.).

[1] Appealed. [2] Watered. [3] Skimmed.

Fines imposed, $270.

REPORT ON INSPECTION OF FOOD AND DRUGS.

Laboratory Examinations of Food and Drugs.

The following tables present the results of the laboratory examinations during the month of June, 1914, of samples of food and drugs collected by inspectors of the Board: —

The cities and towns in which samples were collected were: Andover, Arlington, Barre, Boston, Brockton, Brookline, Burlington, Cambridge, Chelsea, Concord, Dedham, Dudley, Fall River, Haverhill, Ipswich, Lexington, Littleton, Lowell, Lynn, Mansfield, Marlborough, Melrose, New Bedford, Newburyport, North Andover, Norwood, Palmer, Peabody, Quincy, Revere, Salem, Somerville, Springfield, Stoneham, Stoughton, Wakefield, Ware, Webster, Westford, Whitman, Winchester.

Summary of Analyses.

Articles examined.	Number found to be of Good Quality.	Number adulterated or varying from the Legal Standard.	Total.
Butter,	2	–	2
Buttermilk,	1	–	1
Canned fruits and vegetables,	3	–	3
Cider,	8	1	9
Cocoa,	13	17	30
Condensed milk,	4	–	4
Confectionery,	14	–	14
Cordials,	14	–	14
Cream,	13	–	13
Cream of tartar,	1	–	1
Drugs,	179	50	229
Eggs,	6	–	6
Flavoring extracts: —			
Lemon,	2	1	3
Peppermint,	3	1	4
Vanilla,	9	1	10
Wintergreen,	1	–	1
Fruit juice,	1	–	1
Grape juice,	4	–	4
Lime juice,	3	–	3
Honey,	3	–	3
Ice cream,	99	4	103

DEATHS FROM DISEASES DECLARED BY THE STATE BOARD OF HEALTH TO BE DANGEROUS TO THE PUBLIC HEALTH IN TOWNS OF LESS THAN 10,000 POPULATION.

[Under the provisions of chapter 210, Acts of 1913.]

DISEASE.	Place.	WEEK ENDING —			
		June 6.	June 13.	June 20.	June 27.
Tuberculosis, pulmonary (or not classified).	Athol,	–	–	–	1
	Danvers,	–	–	2	–
	Dracut,	–	1	–	–
	Egremont,	–	–	1	–
	Lancaster,	–	1	–	–
	Medfield,	–	–	2	–
	Montague,	1	1	–	–
	North Attleborough,	–	1	–	–
Total,		1	4	5	1
Tuberculosis, other forms.	Winchendon,	–	–	1	–
	Winchester,	–	–	–	1
Total,		–	–	1	1
Diphtheria,	Braintree,	–	1	–	–
	Milton,	–	–	–	1
	Rockport,	–	–	–	1
Total,		–	1	–	2
Scarlet fever,	Milton,	–	–	1	–
	Wellesley,	–	1	–	–
Total,		–	1	1	–
Typhoid fever,	Middleton,	–	–	1	–
Whooping cough,	Dedham,	–	1	–	–
Anterior poliomyelitis,	Easthampton,	–	–	–	1

Week ending June 27, 1914.

CITIES AND TOWNS.	Population. Census for 1910.	Total Number reported.	Tuberculosis, Pulmonary (or not classified).	Tuberculous Meningitis.	Tuberculosis, Other Forms.	Diphtheria.	Typhoid Fever.	Scarlet Fever.	Measles.	Whooping Cough.	Cerebro-spinal Meningitis.
Boston,	686,092	36[1] 41[3]	20[1] 23[2]	6[1] 7[2]	– –	3[1] 3[2]	1[1] 1[2]	1[1] 1[2]	3[1] 3[2]	1[1] 1[2]	1[1] 1[2]
Worcester,	145,986	4	3	–	1	–	–	–	–	–	–
Fall River,	119,295	7	3	1	–	–	–	–	–	3	–
Lowell,	106,294	2	1	–	–	–	1	–	–	–	–
Cambridge,	104,839	8	6	–	–	1	–	–	–	1	–
New Bedford,	96,652	6	3	2	1	–	–	–	–	–	–
Lynn,	89,336	1	–	–	–	1	–	–	–	–	–
Springfield,	88,926	4	3	1	–	–	–	–	–	–	–
Lawrence,	85,892	–	–	–	–	–	–	–	–	–	–
Somerville,	77,236	2	2	–	–	–	–	–	–	–	–
Holyoke,	57,730	2	2	–	–	–	–	–	–	–	–
Brockton,	56,878	–	–	–	–	–	–	–	–	–	–
Malden,	44,404	2	–	–	1	–	–	–	–	1	–
Haverhill,	44,115	1	1	–	–	–	–	–	–	–	–
Salem,	43,697	–	–	–	–	–	–	–	–	–	–
Newton,	39,806	–	–	–	–	–	–	–	–	–	–
Fitchburg,	37,826	–	–	–	–	–	–	–	–	–	–
Taunton,	34,259	2	2	–	–	–	–	–	–	–	–
Everett,	33,484	1	–	–	–	1	–	–	–	–	–
Quincy,	32,642	–	–	–	–	–	–	–	–	–	–
Chelsea,	32,452	3	2	–	–	–	–	–	1	–	–
Pittsfield,	32,121	–	–	–	–	–	–	–	–	–	–
Waltham,	27,834	1	–	–	1	–	–	–	–	–	–
Brookline,	27,792	–	–	–	–	–	–	–	–	–	–
Chicopee,	25,401	–	–	–	–	–	–	–	–	–	–
Gloucester,	24,398	–	–	–	–	–	–	–	–	–	–
Medford,	23,150	3	1	–	1	–	–	–	–	–	1
North Adams,	22,019	1	–	1	–	–	–	–	–	–	–
Northampton,	19,431	–	–	–	–	–	–	–	–	–	–
Beverly,	18,650	–	–	–	–	–	–	–	–	–	–
Revere,	18,219	–	–	–	–	–	–	–	–	–	–
Leominster,	17,580	–	–	–	–	–	–	–	–	–	–
Attleborough,	16,215	–	–	–	–	–	–	–	–	–	–
Westfield,	16,044	1	1	–	–	–	–	–	–	–	–
Peabody,	15,721	1	1	–	–	–	–	–	–	–	–
Melrose,	15,715	–	–	–	–	–	–	–	–	–	–
Woburn,	15,308	–	–	–	–	–	–	–	–	–	–
Newburyport,	14,949	1	–	–	–	–	–	–	–	1	–
Gardner,	14,699	–	–	–	–	–	–	–	–	–	–
Marlborough,	14,579	–	–	–	–	–	–	–	–	–	–
Clinton,	13,075	–	–	–	–	–	–	–	–	–	–
Milford,	13,055	–	–	–	–	–	–	–	–	–	–
Adams,	13,026	–	–	–	–	–	–	–	–	–	–
Framingham,	12,948	–	–	–	–	–	–	–	–	–	–
Weymouth,	12,895	–	–	–	–	–	–	–	–	–	–
Watertown,	12,875	–	–	–	–	–	–	–	–	–	–
Southbridge,	12,592	2	–	–	1	–	–	–	–	–	1
Plymouth,	12,141	–	–	–	–	–	–	–	–	–	–
Webster,	11,509	1	–	1	–	–	–	–	–	–	–
Methuen,	11,448	–	–	–	–	–	–	–	–	–	–
Wakefield,	11,404	–	–	–	–	–	–	–	–	–	–
Arlington,	11,187	–	–	–	–	–	–	–	–	–	–
Greenfield,	10,427	1	–	–	1	–	–	–	–	–	–
Winthrop,	10,132	–	–	–	–	–	–	–	–	–	–
Total of reporting towns,	1,915,345	98	54	13	7	6	2	1	4	7	3

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[1] Nonresidents deducted.

[2] Total deaths.

[3] Total deaths: one death from anterior poliomyelitis.

LIST OF SAMPLES OF FOOD, DRUGS AND MILK COLLECTED DURING THE MONTH OF JUNE, 1914.

Samples of Food in which No Adulteration was detected.

BUTTER.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
8440-R	West End Butter and Egg Store, Blackstone Street, Boston.	
q 13932	Terminal Lunch, Boston.	

CANNED FRUITS AND VEGETABLES.

24286	F. H. Blaise, Boston,	Ritter Pork and Beans.
8424-R	H. Miasian, Cambridge,	American. Celery Soup. American Soda Fountain Company, Boston.
24839	W. & A. Bacon, Boston,	Williams Pork and Beans. Williams Bros. Company, Detroit, Mich.

COCOA.

24059	W. A. Bacon Company, Boston.	
23961	New York Butter Company, Fall River,	Our own. New York Butter Company, Fall River.
24228	Direct Importing Company, Marlborough,	Benefit.
6983-S	Dickson Tea Store, Merrimack Street, Lowell,	Dickson's. Dickson Tea Store, Lowell.
23962	Grand Union Tea Company, Fall River,	Grand Union. Grand Union Tea Company, Brooklyn, N. Y.
23960	Great Atlantic and Pacific Tea Company, Fall River.	Grandmother's. Atlantic and Pacific Tea Company, New York.
24193	G. A. Folsom, East Boston,	White Lilly. G. A. Folsom, East Boston.
q 13433	S. S. Pierce & Co., Boston,	Reynolds'. Reynolds Chocolate Company, Boston.
24196	Wm. Scott & Co., East Boston,	Scott's. Wm. Scott & Co.
24198	Wm. Scott & Co., East Boston,	Dandy. Hooton Cocoa Company, Newark, N. J.
24199	Wm. Scott & Co., East Boston,	Scott's. Scott & Co.
24305	Van Dyke Company, Worcester,	Ambassador. James Van Dyke Company, New York City.
24687	S. S. Pierce Company, Boston,	Reynolds'. Reynolds Chocolate Company, Boston.

CONDENSED MILK.

7097-S	M. O'Keefe Company, Boston,	Delavan Condensed Milk Company, Chicago, Ill. Benefit Brand.
24253	Direct Importing Company, Marlborough,	Benefit Brand. Direct Importing Company, Boston.
8150-R	E. E. Gray Company, Boston,	Gold Cross. Mohawk Condensed Milk Company, New York.
8094-R	Norwood Cash Grocery, Norwood,	Hires Gold Evaporated Milk. Hires Condensed Milk Company, Philadelphia, Pa.

CONFECTIONERY.

7948-R	A. W. Whitcher, Woburn,	Vogue Vanilla Marshmallows. Vogue Candy Company, New York.
7329-S	Blackstone Street, Sidewalk, Boston,	Kisses.
24688	S. S. Pierce Company, Boston,	Reynold's Sweet Milk Fudge Kocoa.
24814	Candyland Company, Cambridge,	Marshmallows.
8408-R	Clinton Candy Company, Springfield,	Kisses.

Samples of Food in which No Adulteration was detected — Continued.

CONFECTIONERY — Concluded.

Number of Sample.	Dealer.	Brand, Wholesaler or Manufacturer.
7982–R	Colonial Confectionery Company, Chelsea,	Candy Kisses.
7984–R	Heisom's, Chelsea,	Candy Kisses. Runkel's.
8178–R	B. U. Hill & Co., Cambridge,	Gilman's Sugar Wafers.
8228–R	C. H. Richardson, Newburyport,	Molasses Sticks.
8230–R	C. H. Richardson, Newburyport,	Molasses Sticks.
8502–R	Shattuck, Haverhill,	Kisses.
q 13761	Whitman Candy Kitchen, Whitman,	Molasses Kisses.
8338–R	S. Kafferns, Boston,	Jelly Beans.

CORDIALS.[1]

Number of Sample.	Dealer.	Brand, Wholesaler or Manufacturer.
7283–S	A. Di Pietro & Co., Boston,	Annisette.
7285–S	A. Di Pietro & Co., Boston,	Sambuco.
7287–S	A. Di Pietro & Co., Boston,	Anasone.
7289–S	A. Di Pietro & Co., Boston,	Strega.
7291–S	A. Di Pietro & Co., Boston,	Grappa.
7013–S	A. Morratta & Co., Boston,	Annisette.
7015–S	A. Morratta & Co., Boston,	Crema Vaniglia.
7017–S	A. Morratta & Co., Boston,	Vermouth. The E. G. Lyons & Raas Company, New York.
7071–S	Neapolitan Wine and Importing Company, Boston,	Grappa Type. Neapolitan Wine and Importing Company, Boston.
7073–S	Neapolitan Wine and Importing Company, Boston,	Annisette. Neapolitan Wine and Importing Company, Boston.
7075–S	Neapolitan Wine and Importing Company, Boston,	Fernet Della Casagallo.
7079–S	Neapolitan Wine and Importing Company, Boston,	Liquore Strega. Guiseppi Alberti, Benevento.
7081–S	Neapolitan Wine and Importing Company, Boston,	Annisette. Enrico Schenone, New York.
7083–S	Neapolitan Wine and Importing Company, Boston,	Vermouth. Morelli & Botta, New York.

CREAM OF TARTAR.

Number of Sample.	Dealer.	Brand, Wholesaler or Manufacturer.
q 13886	People's Store, Fall River,	Widlar's Record Brand.

EGGS.

Number of Sample.	Dealer.	Brand, Wholesaler or Manufacturer.
7397–S	M. Brown & Co., Boston.	
7399–S	M. Brown & Co., Boston.	
7401–S	M. Brown & Co., Boston.	
7403–S	M. Brown & Co., Boston.	
7279–S	Goldsmith, Wall & Co., Boston.	
7243–S	M. Brown & Co., Boston.	

FLAVORING EXTRACTS.

Lemon.

Number of Sample.	Dealer.	Brand, Wholesaler or Manufacturer.
7109–S	Conant & Co., Littleton,	Hartshorn's. E. Hartshorn & Sons, Boston.
24514	Wm. M. Horrigan Company, Boston,	Wm. M. Horrigan Company, Boston.

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[1] These samples were specifically examined for wood alcohol, because of a publication stating that similar substances had been found adulterated with wood alcohol, by the New Jersey State Board of Health. No wood alcohol was detected in any of the cordials examined.

Samples of Food in which No Adulteration was detected — Continued.

FLAVORING EXTRACTS — Concluded.

Peppermint.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
7111-S	Conant & Co., Littleton,	Hartshorn's. E. Hartshorn & Sons, Boston.
7105-S	Josiah Thatcher, Littleton,	Forest City. Prepared at corner of Dwight and Bridge Streets, Springfield.
24572	Grand Union Tea Company,	Grand Union. Grand Union Tea Company, Brooklyn, New York.

Vanilla.

24009	Crofts & Reed Company,	C. & R. Crofts & Reed Company, Chicago, Ill.
24159	Benefit Direct Importing Company, Boston,	Benefit. Direct Importing Company, Boston.
6297-S	Great Ceylon Tea Company, Boston,	Imperial. Henry W. Goodwin & Co., Springfield, Mass.
7107-S	Conant & Co., Littleton,	Hartshorn's. E. Hartshorn & Sons, Boston.
24513	Wm. M. Horrigan Company, Boston,	Mexican Vanilla. Wm. M. Horrigan, Boston.
7950-R	E. H. Callahan, Woburn,	Smith's True Fruit. J. Hungerford Smith Company, Rochester, N. Y.
24245	Towne & Lindman, Boston,	Silas Pierce & Co., Ltd., Boston.
24306	James Van Dyke Company, Worcester,	Ambassador. James Van Dyke Company, New York City.

Wintergreen.

24548	French Market, Webster,	Lee & Osgood Company, Norwich, Conn.

GRAPE JUICE.

8026-R	U. Tassinnau, Somerville,	Naboth. The Naboth Vineyards, Brocton, N. Y.
8386-R	J. F. Carman, Springfield,	Sunbeam. Austin Nichols & Co., New York.
8264-R	Fish Market, Lynn,	Hatchet. Twitchell-Champlin Company, Portland, Me., and Boston.
8388-R	Sadler's Drug Store,	Continental. Continental Fruit Products Company, Worcester.

HONEY.

6755-S	Cobb, Bates & Yerxa Company, Boston,	Own brand.
6299-S	Great Ceylon Tea Company, Boston,	Victor. Simpson Spring Company, South Easton.
24201	C. L. Frazer, East Boston,	– –

ICE CREAM.

8244-R	A. A. Ayer, Lynn,	Strawberry. Own make.
8010-R	Badrosian's Restaurant, Somerville,	Vanilla. Snow, Somerville.
8048-R	Biddle Baking Company, Newburyport,	Vanilla. Austin, Newburyport.
8518-R	S. E. Billings, Roxbury,	Vanilla. Cooper's.
7185-S	Benj. Brath, Newburyport.	
8164-R	Candyland Confectionery Company, Cambridge,	Strawberry.
8248-R	Caracostas Bros., Lynn,	Strawberry. Own make.

Samples of Food in which No Adulteration was detected — Continued.

ICE CREAM — Continued.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
8462-R	A. Carlowe, Haverhill,	Vanilla. Nichols.
8022-R	D. Carra, Somerville,	Strawberry. Snow, Somerville.
8006-R	R. Caterino, Somerville,	Strawberry. Libby.
8232-R	A. G. Chaplin, Lynn,	Strawberry.
q 13982	Petros Chirs Company,	Vanilla.
q 13983	Petros Chirs Company,	Strawberry.
8170-R	S. Christopher, Cambridge,	Strawberry.
8160-R	J. S. Cohen, Cambridge,	Vanilla. Snow Ice Cream Company, Somerville.
8166-R	Geo. Cokopoilos, Cambridge,	Strawberry. Mansion House.
q 13981	B. M. Cook & Sons, Lynn,	Vanilla.
7958-R	Colonial Confectionery Company, Chelsea,	Strawberry. Fash.
8004-R	Concord Domestic Bakery, Concord,	Vanilla.
7087-S	B. J. Conley, Ipswich,	North Shore Creamery Company.
7183-S	Corner Confectionery Store, Newburyport.	
8466-R	James Cutelis, Haverhill,	Nichols.
8012-R	Da Prata Bros., Somerville,	Strawberry. Da Prata Bros., Somerville.
8014-R	Da Prata Bros., Somerville,	Chocolate.
8064-R	Dedham Cafe, Dedham,	Vanilla. Dan's Ice Cream Company.
8096-R	C. T. Dezara, Revere,	Strawberry. Own make.
7211-S	Dion the Baker, Lexington,	Own make.
8158-R	C. J. Dionne, Cambridge,	Vanilla.
8280-R	C. Drodons, Lowell,	Strawberry.
8238-R	Egan & Co., Lynn,	Vanilla.
8080-R	P. Elentras, Norwood,	Strawberry.
8242-R	H. Fluke, Lynn,	Strawberry. Boston Ice Cream Company.
7956-R	Fragopulous, Chelsea,	Strawberry. Fragopulous, Boston Ice Cream Company.
8282-R	J. J. Gallagher, Lowell,	Vanilla.
8108-R	R. Ginsburg, Revere,	Vanilla. Fash.
8284-R	Graffaras Bros., Lowell,	Vanilla.
7085-S	Greek Confectionery Store, Ipswich.	
8100-R	Maloof Hadge Company, Revere,	Strawberry. Bushway.
8152-R	H. Halpern, Cambridge,	Vanilla.
8156-R	J. A. Hattie, Cambridge,	Strawberry.
8154-R	B. W. Hill & Co., Cambridge,	Strawberry. Mansion House.
q 13979	S. Janakas, Lynn,	Vanilla.
q 13780	S. Janakas, Lynn,	Strawberry.
8218-R	Johnnie & Co., Newburyport,	Strawberry.
8220-R	Johnnie & Co., Newburyport,	Vanilla.
8036-R	Johnnie & Co., Newburyport,	Strawberry.
8336-R	S. Kaffeins, Boston,	Strawberry.
8066-R	D. Kanarous, Dedham,	Vanilla.
8234-R	S. Kanzras, Lynn,	Strawberry.
q 13984	Spiros Kanzias, Lynn,	Strawberry.
8110-R	H. Katz, Revere,	Fash's vanilla.
8278-R	S. S. Kresgas, Lowell,	Crushank's vanilla.
8024-R	U. Lassinnau, Somerville,	Vanilla.
8114-R	B. F. Leighton, Revere,	Chocolate. Own make.
8332-R	C. H. Litchfield, Boston,	Strawberry. Fash.
8002-R	McConnell's Drug Store, Concord,	Chocolate.
8418-R	H. Menasian, Cambridge,	Vanilla.
8412-R	W. H. Moran, Cambridge,	Mansion House.
8276-R	F. E. Nelson Company, Lowell,	Crushank.
8460-R	New York Confectionery Company, Haverhill,	Strawberry.
8038-R	Chas. Ogasapian, Newburyport,	Strawberry.
8042-R	Olympia, Newburyport,	Vanilla.
8246-R	Panagakis Bros., Lynn,	Vanilla.
8464-R	M. E. Parker, Haverhill,	Strawberry.
8342-R	Chris Phobos, Boston,	Strawberry.
8468-R	B. T. Pickard, Haverhill,	Strawberry.
8020-R	A. W. Purst, Somerville,	Vanilla. A. W. Purst, Somerville.
8112-R	S. Rabbit, Revere,	Strawberry. Bushway.
8340-R	D. M. Rakoohan, Boston,	Strawberry.
8070-R	D. Salemme, Norwood,	Strawberry.
8062-R	C. Salemme, Dedham,	Vanilla.
8098-R	H. Sandler, Revere,	Strawberry.
8416-R	A. Sarkisian, Cambridge,	Vanilla.
8420-R	C. Schifferdecher, Cambridge,	Strawberry.

Samples of Food in which No Adulteration was detected — Continued.

ICE CREAM — Concluded.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
8240-R	N. Seaffer, Lynn,	Vanilla.
8102-R	John Shayel, Revere,	Strawberry.
8168-R	S. Sheinz, Cambridge,	Vanilla.
8040-R	Smasey Bros., Newburyport,	Vanilla. Ogasapian, Newburyport.
8236-R	Smith Bros., Lynn,	Vanilla.
8414-R	Mrs. T. Soutell, Cambridge,	Strawberry.
8106-R	D. Spande Co., Revere,	Bushway.
8044-R	Sugar Bowl Confectionery Company, Newburyport.	Strawberry. Jersey Ice Cream Company, Lawrence.
8288-R	Taroularies Bros., Lowell,	Vanilla. Own make.
8330-R	Tony Rosso, Boston,	Strawberry. Boston Ice Cream Company.
8516-R	G. L. Triamtajel, Roxbury,	Strawberry. Own make.
8008-R	Union Square Lunch Company, Somerville,	Vanilla. Da Prata Bros., Somerville.
8208-R	Hiram Watts, Newburyport,	Strawberry.
8290-R	M. F. Welch, Lowell,	Vanilla.
8104-R	J. Wheeler, Revere,	Vanilla.
8250-R	E. C. Woodman, Lynn,	Strawberry. Cook.
8016-R	F. W. Woolworth, Somerville,	Neapolitan.
8162-R	F. W. Woolworth, Somerville,	Strawberry. Neapolitan.
8050-R	Hiram Watts, Newburyport,	Vanilla.
8118-R	F. W. Woolworth, Somerville,	Vanilla. Neapolitan.
7091-S	8 Central Street, Ipswich,	Strawberry.
7357-S	Olympian Fruit Company, Salem.	
7359-S	Bay State Ice Cream Company, Salem.	
7361-S	North Shore Creamery Company, Salem,	Harlequin.

JAMS AND JELLIES.

6751-S	Cobb, Bates & Yerxa Company, Boston,	Nestor. Strawberry Jam.
6753-S	Cobb, Bates & Yerxa Company, Boston,	Raspberry Jam.
24817	J. A. Holmes & Co., Cambridge,	Ferndell Raspberry Jam. Sprague, Warner & Co., Chicago, Ill.
24818	J. A. Holmes & Co., Cambridge,	Ferndell. Cherries. Sprague, Warner & Co., Chicago, Ill.
q 13883	People's Store, Fall River,	Colonial. Sulzberger & Sons.
24840	W. & A. Bacon, Boston,	Williams' Apple and Grape Jelly. Williams Bros. Company, Detroit, Mich.
24598	Saville, Somes & Co., Boston.	
q 13884	People's Store, Fall River,	Proctor's Strawberry and Apple Jelly. Proctor Preserve Company, West Somerville.

LARD.

7149-S	J. P. Lydon, Wakefield.	

MAPLE SUGAR.

7960-R	Freeman's Drug Store, Chelsea.	
7986-R	Fruit Store, Stoneham Square, Stoneham.	
24788	Fruit Store, 1685 Washington Street, Boston.	

OLIVE OIL.

24836	French Delicatessen, Eliot Street, Boston,	Filippo Conrieri, Dolceacqua on the Riviera, Italy.
7117-S	Greek Grocery, Ipswich.	
8500-R	James Carbone, Haverhill,	James Carbone, Haverhill.
24544	Condakes Fruit Store, East Boston,	

Samples of Food in which No Adulteration was detected — Concluded.

ROOT BEER EXTRACT.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
24573	Grand Union Tea Company, Fall River,	Grand Union. Grand Union Tea Company, Brooklyn, N. Y.
8300-R	Grand Union Tea Company, Lowell.	

SALAD DRESSING.

24328	L. Z. Carpenter, Attleborough,	Faultless Mayonnaise Salad Dressing. E. M. Salisbury, Providence, R. I.
24376	Walton Bakery, Boston.	
24841	W. & A. Bacon, Boston,	Williams. Williams Bros. Company, Detroit, Mich.

SHRIMP.

7419-S	Boston and New York Fish Company, Boston.	

SOFT DRINKS.

24596	Fruit Store, 1085 Washington Street, Boston,	White House Orangeade. Standard Bottling and Extract Company, Boston.
24597	Cobb, Aldrich & Co., Boston,	Standard Lemon Sour. Standard Bottling and Extract Company, Boston.

SPICES.

6987-S	Grand Union Tea Company, Lowell,	Grand Union. Prepared Mustard. Grand Union Tea Company, Brooklyn, N. Y.
q 13887	People's Store, Fall River,	Mustard. The Century Tea Company, Newark, N. J.

SYRUPS.

24602	Cobb, Aldrich & Co., Boston,	Eureka Raspberry Syrup. Eureka Syrup Company, Boston.
24710	Dewey & Company, Boston,	Puritas Orangeade. The Puritas Company, Boston.
24711	Dewey & Company, Boston,	Puritas Lemon and Lime. The Puritas Company, Boston.
24712	Dewey & Company, Boston,	Puritas Fruit Punch. The Puritas Company, Boston.

VINEGAR.

24835	French Delicatessen, Eliot Street, Boston,	Joseph Losere & Co., Boston.

WINE.

7077-S	Neapolitan Wine and Importing Company, Boston,	Marsala Wine. Green Star Liquor Manufacturing Company, New York.

Samples of Food which upon Examination were found to be labeled in Accordance with the Law.

FRUIT JUICES.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
7940-R	Kent's Grocery Store, Concord, ...	Hay's Five Fruit. H. H. Hay's Sons, Portland, Me.

LIME JUICE.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
24601	Cobb, Aldrich & Co., Boston, ...	Nector Brand. J. P. W. Von]Laer & Co., Boston.
7978-R	Tea and Coffee Store, Chelsea, ...	Americo. American Grocery Company, Inc., Boston.
24543	Raush Bros., East Boston, ...	Commercial. Urguhart Bros., Boston.

SOFT DRINKS.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
8392-R	Kings Public Market, Springfield, ...	Lemos. C. M. Brooke & Son, Brooklyn, N. Y.

SYRUPS.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
24600	Cobb, Aldrich & Co., Boston, ...	Trysum Orange Fruit Syrup. Elite Syrup Company, Boston.

Samples of Food which upon Examination were found to be adulterated.

SWEET COCOA.[1]

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
24569	Atlantic and Pacific Tea Company, Fall River, .	A. and P. Sweet Lunch Cocoa. Great Atlantic and Pacific Tea Company, New York.
23963	J. M. Deane, Fall River, ...	Ralston Health Club Sweetened Cocoa. Stephen L. Bartlett Company, Boston.
6985-S	Grand Union Tea Company, Lowell, . . .	Grand Union. Grand Union Tea Company, Brooklyn, N. Y.
24571	Grand Union Tea Company, Fall River, . .	Grand Union. Grand Union Tea Company, Brooklyn, N. Y.
24570	James Van Dyke Company, Fall River, . .	James Van Dyke Company, New York.
8028-R	Grocery Store, 70 Union Square, Somerville, .	A. and P. Atlantic and Pacific Tea Company, New York.
24786	John M. Dean, Fall River, ...	Ralston. Stephen L. Bartlett, Co. Boston
24708	William Scott & Co., Boston, ...	Scott's. Wm. Scott & Co.
24787	R. Seaver & Son, Boston, ...	Huyler's sweet Cocoa.
24686	S. S. Pierce Company, Boston, ...	Phillips Digestible Cocoa. The Chas. H. Phillips Chemical Company, New York.
24689	Houghton & Dutton, Boston, ...	Barker's Hasty Lunch Cocoa. Knickerbocker Chocolate Company, New York.
24542	Great Atlantic and Pacific Tea Company, Fall River.	A. and P. Sweet Lunch Cocoa. Great Atlantic and Pacific Tea Company, New York.

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[1] Per cent. of sugar not stated.

Samples of Food which upon Examination were found to be adulterated — Continued.

FLAVORING EXTRACTS.

Lemon.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
24551[1]	Main Street Grocery, Webster, ...	Eagle. Eagle Specialty Company, Boston.
24858[2]	Riker-Jaynes Company, Boston, ...	Riker's True Extract of Lemon. Wm. B. Riker & Son Company, New York.

Peppermint.[3]

24552	Main Street Grocery, Webster, ...	President. S. Ainsberg & Son, Worcester.

Vanilla.[4]

24550	Main Street Grocery, Webster, ...	Eagle. Eagle Specialty Company, Boston.

ICE CREAM.[5]

8334-R	Alex Kefengis & Co., Boston, ...	Strawberry. Own make (3.40 per cent. fat).

JAMS AND JELLIES.[6]

24598	Saville Somes & Co., Boston, ...	Atwood's Strawberry Jam. Atwood Preserving Company, Cambridge.

MAPLE SUGAR.[7]

24815 8396-R 8428-R	Candyland Company, Cambridge. Candy Store, Springfield, ... Patten's, North Cambridge.	John W. Rupple.

MEAT PRODUCTS.[8]

Hamburg Steak.

8222-R	Meat Market, Merrimack Street, Newburyport.	

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[1] Labeled lemon oil, 6.5 per cent.; found practically none.

[2] Labeled alcohol, 90 per cent.; found 70 per cent.

[3] Marked 3 per cent. peppermint oil, found 0.6 per cent.

[4] Labeled vanillin, 3 per cent.; coumarin, 1 per cent.; found vanillin, .192 per cent.; coumarin, .093 per cent.

[5] Below fat standard.

[6] Contained benzoic acid.

[7] Contained cane sugar.

[8] Preserved with a compound of sulphurous acid. No statement on label.

Samples of Food which upon Examination were found to be adulterated — Concluded.

SOFT DRINKS.[1]

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
24599	Cobb, Aldrich & Co., Boston, ...	New European Drink, Lesco. Lesser & Co., Malden.

SHRIMP.[2]

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
7421-S	Sidewalk Dealer, cor. of Richmond and North Streets, Boston.	

Samples of Drugs in which No Adulteration was detected.

ALCOHOL.

Number of Sample.	DEALER.	Wholesaler or Manufacturer.
24595	Shortell & Timmins, ...	Shortell & Timmins, Boston.

BORAX.

Number of Sample.	DEALER.	Wholesaler or Manufacturer.
q 13749	The Appleton Pharmacy, Boston.	

BORIC ACID.

Number of Sample.	DEALER.	Wholesaler or Manufacturer.
23997	Crofts & Reed, Chicago, Ill., ...	Crofts & Reed, Chicago, Ill.

ESSENCE OF PEPSIN.

Number of Sample.	DEALER.	Wholesaler or Manufacturer.
8368-R	Palmer Drug Company, Palmer.	

GIN.

Number of Sample.	DEALER.	Wholesaler or Manufacturer.
7395-S	F. H. Stacy, Andover.	

CAMPHOR LINIMENT.

Number of Sample.	DEALER.	Wholesaler or Manufacturer.
q 13756	The Ames Drug Store, Brockton.	
q 13757	C. T. Duncan, Brockton.	

LYE.

Number of Sample.	DEALER.	Wholesaler or Manufacturer.
23985	Crofts & Reed, Chicago, Ill., ...	Crofts & Reed, Chicago, Ill.

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[1] Containing salicylic acid.

[2] Decomposed.

Samples of Drugs in which No Adulteration was detected — Continued.

SPIRIT OF ANISE.

Number of Sample.	DEALER.	Wholesaler or Manufacturer.
8402–R	H. Adams & Co., Springfield.	
8202–R	H. F. Hawthorne, Cambridge.	
8128–R	Jaynes Drug Company, Boston.	
8146–R	Jaynes Drug Company, Boston.	
8254–R	Jaynes Drug Company, Boston.	
8452–R	Klein's Pharmacy, Boston.	
8444–R	Pelham Pharmacy, Boston.	
8400–R	Frank L. Stone, Springfield.	
8292–R	H. J. Turcotte, Lowell.	

SPIRIT OF CAMPHOR.

7962–R	C. W. Freeman, Chelsea.	
q 1371	Fiske & Strecker, Greenfield.	
24654	H. A. Blackmer, New Bedford.	
24651	The Browne Pharmacy, New Bedford.	
24658	The Browne Pharmacy, New Bedford.	
24659	C. H. & H. A. Lawton, New Bedford.	
24666	Church & Hammond, New Bedford.	
24489	Farley Cadee Company, North Adams.	
24549	French Market, Webster.	
8262–R	J. Maro Harriman, Lynn.	
24662	J. M. Kelliher, New Bedford.	
8458–R	Riker Jaynes Company, Boston.	
8456–R	A. D. Sheppherd & Co., Boston.	
q 13715	Wells & Nash, Greenfield.	
24488	Wilson House Pharmacy, North Adams.	
24478	Buffington Pharmacy, Worcester.	
24479	William L. Davis, Worcester.	
24482	People's Pharmacy, Worcester.	
24485	Victor Bergwell, Worcester.	

SPIRIT OF NITROUS ETHER.

q 13754	The Ames Drug Company, Brockton.	
q 13928	Fred W. Archer, Dorchester Lower Mills.	
q 13819	Bailey's Pharmacy, Cambridge.	
24812	J. E. Brady, Fall River.	
8270–R	Frank H. Broad, Lynn.	
8124–R	Broadway Pharmacy, Revere.	
8090–R	A. F. Brown, Norwood.	
24653	The Browne Pharmacy, New Bedford.	
8438–R	Burden & Co., Boston.	
8056–R	Castleburn Pharmacy, Newburyport.	
q 13759	M. B. Crowell & Co., Brockton.	
q 13815	Cunningham Drug Store, Cambridge.	
8116–R	C. T. Dezara, Revere.	
24757	L. D. Drury, Boston.	
q 13758	C. T. Duncan, Brockton.	
q 13822	J. H. Fitzgerald, Cambridge.	
24547	French Market, Webster.	
8126–R	Frost & Co., Revere.	
8188–R	C. W. Grossmith, Arlington.	
24810	Dr. Hecke Pharmacy, Fall River.	
q 13880	Hollis Pharmacy, Framingham, South.	
q 13824	Vernon Laing, Cambridge.	
24661	C. H. & H. A. Lawton, New Bedford.	
8184–R	A. T. McColgan, Cambridge.	
8252–R	J. M. Nelson, Lynn.	
8194–R	Newtowne Pharmacy, Cambridge.	
8118–R	E. E. Orr, Revere.	
8120–R	G. E. Palmer, Revere.	
8434–R	Periata Farmacia, 273 Hanover Street, Boston.	
7966–R	Chas. Rapoport, Chelsea.	
8436–R	Roma Pharmacy, Boston.	
8374–R	F. Scalise & Co., Springfield.	
7095–S	Eben R. Smith, Ipswich.	
8406–R	J. D. Smith, Springfield.	
24806	S. J. Smith, Fall River.	
7243–S	Morse-Winslow Company, Boston.	

Samples of Drugs in which No Adulteration was detected — Continued.

SPIRIT OF NITROUS ETHER — Concluded.

Number of Sample.	DEALER.	Wholesaler or Manufacturer.
7393-S	F. H. Stacy, Andover.	
24809	Toubey's Pharmacy, Fall River.	
q 13951	E. I. Sawyer, Boston.	
q 13952	Truman T. Reid, Boston.	
8186-R	Russell Pharmacy, Cambridge.	

SPIRIT OF PEPPERMINT.

q 13755	The Ames Drug Store, Brockton.	
8344-R	Arborway Pharmacy, Forest Hills.	
q 13818	Bailey's Pharmacy, Cambridge.	
24655	H. A. Blackner, New Bedford.	
24813	J. E. Brady, Fall River.	
24652	The Browne Pharmacy, New Bedford.	
8432-R	H. Cabbitt & Co., Boston.	
24664	Church & Hammond, New Bedford.	
q 13760	M. B. Crowell Company, Brockton.	
8180-R	Cunningham Drug Company, Cambridge.	
8306-R	A. W. Dow & Co., Lowell.	
24758	L. O. Drury, Boston.	
24764	Lynch's Pharmacy, Boston.	
7996-R	H. L. Emerson, Stoneham.	
8352-R	Egelston Pharmacy, Boston.	
q 13823	J. H. Fitzgerald, Cambridge.	
24762	J. P. Gammon, Boston.	
8360-R	Glen Road Pharmacy, Jamaica Plain.	
24752	Hall & Co., Boston.	
8136-R	Hanover Drug Company, Boston.	
24754	Hawthorne Pharmacy, Boston.	
7994-R	Hayward & Fox, Stoneham.	
24811	Dr. Hicks Pharmacy, Boston.	
24593	Hollis Street Pharmacy, Boston.	
8148-R	Jaynes Drug Company, Boston.	
24663	J. M. Kelliher, New Bedford.	
q 13825	Vernon Laing, Cambridge.	
q 13816	W. E. Lane, Cambridge.	
24660	C. H. & H. A. Lawton, New Bedford.	
8384-R	A. E. Lerche, Springfield.	
8450-R	Liggett's Drug Store, Boston.	
8182-R	Geo. M. Olive, Cambridge.	
8354-R	T. T. Reid, Boston.	
8404-R	C. V. Ryan, Springfield.	
8348-R	E. I. Sawyer, Boston.	
24592	S. A. D. Sheppherd, Boston.	
24807	S. J. Smith, Fall River.	
8032-R	F. R. Wadleigh, Somerville.	
8138-R	U. A. White, Boston.	
8316-R	Woodward the Druggist, Boston.	
q 13811	Winship, Druggist, Stoughton, Norwood, Mansfield.	

SPIRIT OF WINTERGREEN.

8378-R	Bay State Drug Store, Palmer.	
q 13706	A. S. Colley Company, Boston.	
7990-R	C. O. Currier, Stoneham.	
q 13826	W. Donaghy, Cambridge.	
8304-R	A. W. Dow & Co., Lowell.	
8134-R	Epstein Drug Company, Boston.	
q 13711	C. J. Foley, Greenfield.	
8346-R	Forest Hills Pharmacy, Forest Hills.	
8088-R	Holton's Drug Store, Dedham.	
8454-R	W. B. Hunt, Boston.	
8446-R	Riker-Jaynes, Boston.	
8144-R	Riker-Jaynes, Boston.	
8366-R	R. Johnson, Springfield.	
8268-R	J. J. Nally, Lynn.	
8368-R	Palmer Drug Company, Palmer.	
8142-R	C. Fred Wright, Boston.	
8132-R	W. H. Wright, Boston.	

Samples of Drugs in which No Adulteration was detected — Concluded.

TINCTURE OF IODINE.

Number of Sample.	DEALER.	Wholesaler or Manufacturer.
8198–R	U. F. Argus & Co., Arlington.	
24657	The Browne Pharmacy, New Bedford.	
8226–R	Castlehun, Newburyport.	
8058–R	C. S. Davis, Newburyport.	
24756	L. D. Drury, Boston.	
7998–R	H. S. Emerson, Stoneham.	
24495	T. C. Farley, North Adams.	
24761	J. P. Gammon, Boston.	
24751	Hall & Co., Boston.	
24755	Hawthorne Pharmacy, Boston.	
q 13881	Hollis Pharmacy, South Framingham.	
24763	Lynch's Pharmacy, Boston.	
7968–R	Markell-Weston Drug Company, Chelsea.	
8376–R	W. W. Miner, Ware.	
7974–R	L. C. Morris, Chelsea.	
8196–R	H. A. Perham, Arlington.	
8380–R	Person's Pharmacy, Ware.	
24760	J. R. Sawyer, Boston.	
7964–R	Geo. H. Smith, Chelsea.	
7972–R	C. A. Tibbetts, Chelsea.	
8294–R	H. J. Turcotte, Lowell.	
8086–R	H. S. Wardle, Dedham.	
8176–R	O. W. Whittemore, Arlington.	
7970–R	Charles Rapoport, Chelsea.	
q 13929	Fred W. Archer, Dorchester Lower Mills.	
24713	Ideal Pharmacy, Boston.	
q 13891	Monte Pio Pharmacy, Acushnet Avenue, New Bedford.	

TINCTURE OF VANILLA.

q 13813	Central Square Pharmacy, Cambridge.	
q 13707	F. S. Cooley Company, Boston.	
7988–R	C. O. Currier, Stoneham.	
7992–R	Hayward & Fox, Stoneham.	
q 13528	C. W. Mitchell Company, Boston.	
q 13708	Morse-Winslow Drug Co., Boston.	
q 13391	A. D. Ross, Boston.	
q 13322	B. M. Wallenberg, Boston.	
q 13130	Wm. A. Phillips, Rockland.	
q 13434	J. E. Sullivan & Co., Rockland.	

PROPRIETARY DRUGS.

24004	Asthma Tablets, ...	Crofts & Reed Company, Chicago, Ill.
8272–R	Dr. Hobson's Sunburn Remedy, ...	A. W. Whitcher, Woburn. Pfeiffer Chemical Company, St. Louis and Philadelphia.
8470–R	Jones Barber Shop, Haverhill, ...	The C. Hughel Company, Indianapolis, Ind.
8522–R	Royale Almond Cream, ...	F. W. Woolworth, Roxbury. Ed Gerarde Perfume Company, Chicago, Ill.
8130–R	Snuff, Red Top, ...	W. H. Knight, Boston. Byfield Snuff Company, Byfield, Mass.

WITCH HAZEL EXTRACT.

q 13750	The Appleton Pharmacy, Boston.	
7115–S	Conant & Co., Boston.	
24545	Railroad Grocery Store, Webster.	
7099–S	Josiah P. Thatcher, Littleton.	

Samples of Drugs which upon Examination were found to be labeled in Accordance with the Law.

PROPRIETARY DRUGS.

Number of Sample.	DEALER.	Wholesaler or Manufacturer.
24000	Cold Cure,	Crofts & Reed, Chicago, Ill.
23996	Cough Syrup,	Crofts & Reed, Chicago, Ill.
24001	Diarrhœa Tea,	Crofts & Reed, Chicago, Ill.
24002	Neuralgia Tablets,	Crofts & Reed, Chicago, Ill.
24003	Toothache Drops,	Crofts & Reed, Chicago, Ill.

Samples of Drugs which upon Examination were found to be adulterated.

ALCOHOL.

Number of Sample.	DEALER.	Wholesaler or Manufacturer.	Per Cent. of required Strength.
q 13701	William Leipple, Greenfield,	– –	–[1]

SPIRIT OF ANISE.

8442-R	Gardner the Druggist, Boston,	– –	2
24753	Holbrook's Central Drug Store, Lynn,	– –	66

SPIRIT OF CAMPHOR.

24667	C. H. Church, New Bedford,	– –	83

SPIRIT OF NITROUS ETHER.

8260-R	H. C. Bulfinch & Granger Company, Lynn,	– –	82
24665	Church & Hammond, New Bedford,	– –	64
8092-R	Clark's Pharmacy, Norwood,	– –	76
8084-R	G. W. Cole, Dedham,	– –	42
7089-S	B. J. Conley, Ipswich,	– –	78
7275-S	Franklin Square Pharmacy, Melrose,	– –	81
8054-R	Goodridge Drug Company, Newburyport,	– –	50
8206-R	Goodridge Drug Company, Newburyport,	– –	44
8356-R	Holton's Pharmacy, Dedham,	– –	71
8224-R	Frank Hoyt, Newburyport,	– –	80
8200-R	H. F. Hawthorne, Cambridge,	– –	71
q 13820	Kendall Drug Company, Cambridge,	– –	66
q 13817	W. E. Lane, Cambridge,	– –	0.9
q 13953	Kendall Drug Company, Cambridge,	– –	62
q 13954	W. E. Lane, Cambridge,	– –	0.9
8000-R	Middlesex Drug Company, Stoneham,	– –	81
8258-R	H. S. Wardle, Dedham,	– –	63
q 13810	Winship, Druggist, Stoughton and Norwood,	– –	61
8122-R	W. A. Wry & Co., Revere,	– –	82

SPIRIT OF PEPPERMINT.

24811	Dr. Hick's Anthony Pharmacy, Fall River,	– –	36
8140-R	Ideal Pharmacy, Boston,	– –	60
8310-R	Ideal Pharmacy, Boston,	– –	61
q 13821	Kendall Drug Company, Cambridge,	– –	74
8370-R	Lynde & Gould, Palmer,	– –	58
8190-R	W. C. Reycroft, North Cambridge,	– –	72
24759	John R. Sawyer, Jamaica Plain,	– –	76

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[1] 76.94 per cent. alcohol by volume.

Samples of Drugs which upon Examination were found to be adulterated — Concluded.

SPIRIT OF WINTERGREEN.

Number of Sample.	DEALER.	Wholesaler or Manufacturer.	Per Cent. of required Strength.
q 13709	Morse-Winslow Drug Shop, Boston, . . .	- -	76

COMPOUND TINCTURE OF VANILLIN.

q 13827	W. Donaghy, Cambridge,[1]	- -	

TINCTURE OF VANILLA.

24494	T. C. Farley, North Adams,[2]	- -	

EXTRACT OF VANILLA COMPOUND.

q 13710	Charles J. Foley, Greenfield,[3]	- -	

Samples of Milk which upon Examination were found to be adulterated.

Number of Sample.	Name of Dealer, Wholesaler or Producer.	Results of Analyses.
24637	Frank Babcock, Dudley, . . .	Total solids, 11.20 per cent.; fat, 3.80 per cent.; contained added water.
24638	Frank Babcock, Dudley, . . .	Total solids, 12.20 per cent.; fat, 3.90 per cent.; contained added water.
24640	Frank Babcock, Dudley, . . .	Total solids, 12.36 per cent.; fat, 4.05 per cent.; contained added water.
24645	Frank Babcock, Dudley, . . .	Total solids, 12.20 per cent.; fat, 4.00 per cent.; contained added water.
24646	Frank Babcock, Dudley, . . .	Total solids, 11.46 per cent.; fat, 3.10 per cent.; contained added water.
24647	Frank Babcock, Dudley, . . .	Total solids, 10.56 per cent.; fat, 2.50 per cent.; contained added water.
24649	Frank Babcock, Dudley, . . .	Total solids, 11.64 per cent.; fat, 3.50 per cent.; contained added water.
24650	Frank Babcock, Dudley, . . .	Total solids, 11.66 per cent.; fat, 3.60 per cent.; contained added water.
q 13901	Oscar Delage, Dartmouth, . . .	Total solids, 11.40 per cent.; fat, 2.35 per cent.; proteins, 3.09 per cent.; skimmed milk.
8274-R	C. & K. Lunch, Lowell, . . .	Total solids, 12.16 per cent.; fat, 2.40 per cent.; proteins, 3.77 per cent.; skimmed milk.
q 13904	John B. Mello, New Bedford, . .	Total solids, 11.34 per cent.; fat, 2.45 per cent.; proteins, 3.18 per cent.; skimmed milk.
q 13905	M. B. Mello, New Bedford, . . .	Total solids, 10.92 per cent.; fat, 2.50 per cent.; proteins, 3.02 per cent.; skimmed milk.
24589	A. A. Stone, Winthrop, ...	Total solids, 10.74 per cent.; fat, 1.95 per cent.; proteins, 3.14 per cent.; skimmed milk.

[1] Not according to National Formulary.

[2] Made from exhausted vanilla beans or a highly diluted extract.

[3] Not up to the requirements of the label.

Samples of Milk which upon Examination were found to be adulterated — Concluded.

Number of Sample.	Name of Dealer, Wholesaler or Producer.	Results of Analyses.
7213–S	Warren P. Sweetser, Westford, . .	Total solids, 10.18 per cent.; fat, 3.90 per cent.; contained added water.
7215–S	Warren P. Sweetser, Westford, . .	Total solids, 10.14 per cent.; fat, 3.25 per cent.; contained added water.
7217–S	Warren P. Sweetser, Westford, . .	Total solids, 8.92 per cent.; fat, 3.00 per cent.; contained added water.
7219–S	Warren P. Sweetser, Westford, . .	Total solids, 10.08 per cent.; fat, 3.10 per cent. contained added water.
24567	William T. Wood, Tiverton, . . .	Total solids, 10.60 per cent.; fat, 3.30 per cent. contained added water.
24699	L. G. Rubinowitz, Springfield, . .	Total solids, 10.68 per cent.; fat, 1.60 per cent. proteins, 3.35 per cent.; skimmed milk.

COLD STORAGE.

Articles in Cold Storage condemned upon Physical and Chemical Examinations as Unfit for Food.

Date.	Articles.	Weight (Pounds).	Reasons.	Disposition.
June 3, 1914	Calves' livers, . .	5	Decomposed, . .	Incinerated
June 5, 1914	Turkeys, . . .	156	Decomposed, . .	Rendered
June 5, 1914	Mackerel, . . .	5,100	Decomposed, . .	Rendered
June 6, 1914	Fowl, . . .	468	Decomposed, . .	Rendered
June 8, 1914	Chickens, . . .	104	Decomposed, . .	Rendered
June 11, 1914	Chickens, . . .	707	Decomposed, . .	Rendered
June 16, 1914	Pork trimmings, .	54	Decomposed, . .	Rendered
June 29, 1914	Poultry, . . .	110	Decomposed, . .	Rendered
Total, .	. . . . . .	6,704		

Chemical Examinations of Samples of Cold-storage Goods.

Article.	Number found to be of Good Quality.	Number found to be Unfit for Food.	Total Number of Samples examined.
Fowl, ...	–	2	2
Mackerel, ...	–	2	2
Totals, ...	–	4	4

REPORT ON INSPECTION OF DAIRIES.

During the month of June, 1914, 224 dairies were examined in the following places: —

PLACE.	Number examined.	Class AA.	Class A.	Class B.	Unclean Dairies.	Per Cent. Clean Dairies.
Amherst,	14	–	–	2	12	14.29
Belchertown,	1	–	–	1	–	100.00
Essex,	35	–	–	6	29	17.14
Gloucester,	45	–	–	8	37	17.78
Granby,	26	–	–	1	25	3.85
Hadley,	6	–	–	–	6	–
Holyoke,	6	–	–	–	6	–
Lynn,	12	–	–	3	9	25.00
Revere,	7	–	–	7	–	100.00
Saugus,	38	1	–	15	22	42.11
Southampton,	25	–	–	4	21	16.00
South Hadley,	1	–	–	–	1	–
Sunderland,	1	–	–	1	–	100.00
Westfield,	7	–	–	1	6	14.29

Total number of dairies examined,	224
Total number of commendable dairies,	50
Total number of unclean dairies,	174
Percentage of dairies which passed inspection,	22.32

In addition to the above, 47 dairies were visited at which the sale of milk had been discontinued, 1 of which is making butter; also, 1 dairy was reported as producing less than 20 quarts of milk a day.

Included in the total number of dairies visited were 49 which had recently started in the milk-producing business and were inspected for the first time.

The names of the owners of the dairies found to be worthy of commendation follow: —

AMHERST.

Class B.

	Per Cent.		Per Cent.
Thomson, H. M.,	64	Tirrell, A. R.,	63¾

BELCHERTOWN.

Class B.

	Per Cent.
Bissell, Martin,	64¼

ESSEX.

Class B.

	Per Cent.		Per Cent.
Burnham, Gardner,	60	Low, Lyman,	61
Coggswell, Caleb M.,	60	Prest, John,	60½
Gaffney, William M.,	60	"Town Farm",	68½

GLOUCESTER.

Class B.

Babson, E. W.,	67¾	Lane, H. Wallace,	70¾
Hagstrom, Peter,	68½	Nutton, John G.,	62¼
Hibbard, F. W.,	60	Stanley, R. S.,	71¼
Lane, Howard P.,	67¼	West, Henry,	62

GRANBY.

Class B.

	Per Cent.
Chevier, (Rev.) Charles,	62½

LYNN.

Class B.

Dearborn, Fred D.,	65	Harmon, G. W.,	69
Graham, Fred J.,	71½		

REVERE.

Class B.

Brown, Allen J.,	68	Flynn, Edward,	72
Clark, Patrick,	66½	Janvrin, Samuel,	65
Coughlin, Thomas,	60½	Melia, James,	63
Cowhig, John J.,	69		

SAUGUS.

Class AA.

	Per Cent.
Bennett, Frank P.,	92

Class B.

Berthold, Conrad,	62¾	McCullough, John F.,	69¾
Burns, (Mrs.) Catherine,	64	Naso, Charles,	63¼
Carr, T. H., & Son,	64½	Nicholson, George F.,	73½
Edmands Brothers,	66½	Penney, H. J.,	61¾
Fiske, F. E.,	61¾	Pyrah, George,	71
Gault, C. E.,	61½	Stillings, C. E.,	65¼
Hawkes, Richard,	61¾	Veazey, D. L.,	60¼
Longfellow, E. M.,	70½		

SOUTHAMPTON.

Class B.

	Per Cent.		Per Cent.
Crandall, M. G.,	63½	Searles, A. H.,	61
Klopfenstein, Peter,	60	Searles, O. C.,	62

SUNDERLAND.

Class B.

	Per Cent.
Crocker, B. A.,	62½

WESTFIELD.

Class B.

Lorenz, Henry,	61½

CLASSIFICATION OF DAIRIES.

AA = 90 to 100 per cent.
A = 75 to 90 per cent.
B = 60 to 75 per cent.
Below Class B (60 per cent.), unclean or dirty.

FOOD AND DRUG INSPECTION OF THE MASSACHUSETTS STATE BOARD OF HEALTH. — A REVIEW OF RESULTS OBTAINED DURING RECENT YEARS.

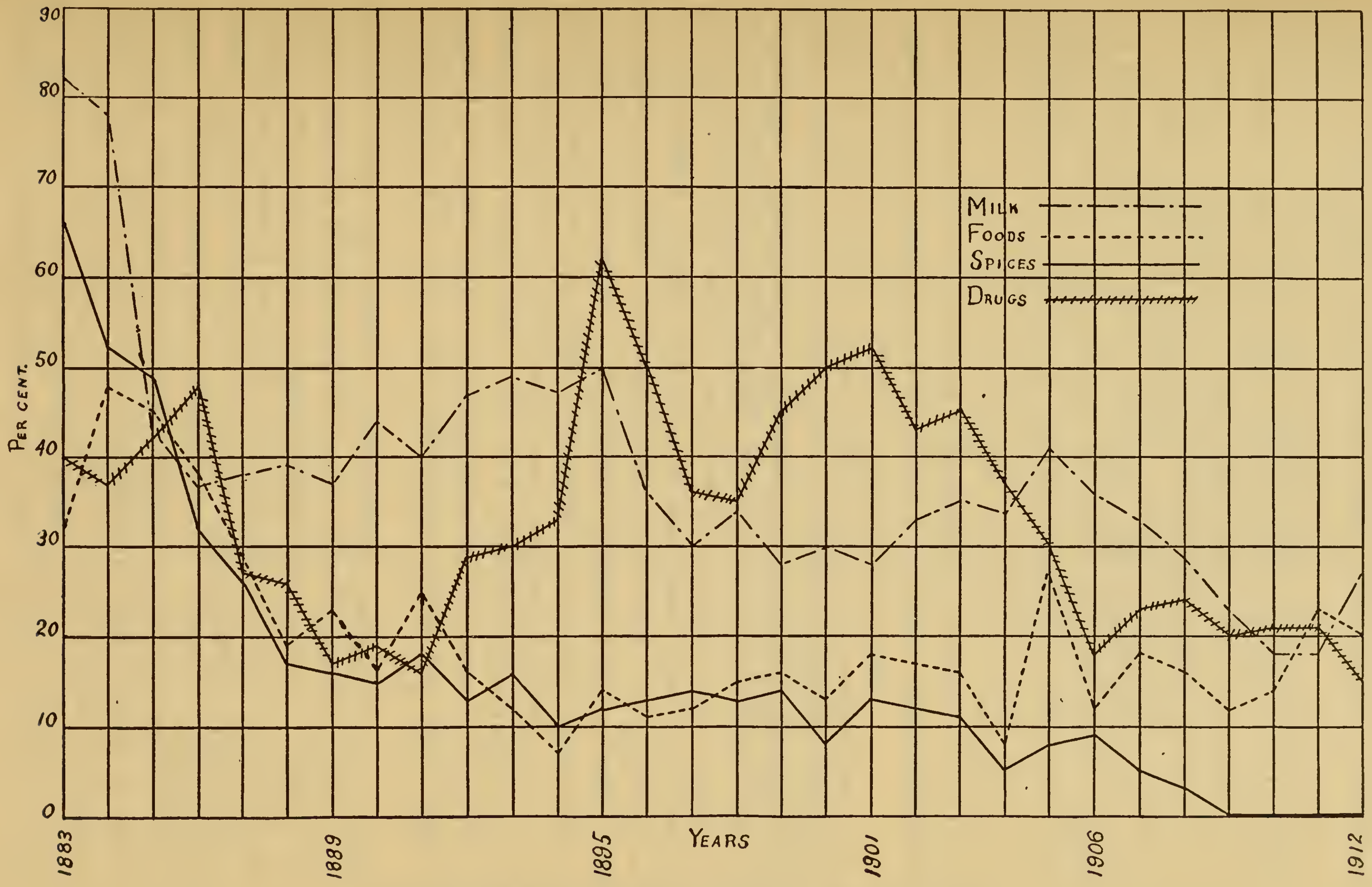
BY HERMANN C. LYTHGOE, CHIEF ANALYST, FOOD AND DRUG DEPARTMENT OF THE MASSACHUSETTS STATE BOARD OF HEALTH.

For thirty-one consecutive years the State Board of Health has enforced the laws relating to the sale of adulterated food and drugs, which has resulted in an improvement in the quality of the food and drug supply of the State. The prevailing popular opinion is that the food law is something new, and that our foods are adulterated in such a manner and to such an extent that the American public is in great danger of degeneration and extermination. These views are no doubt due to the fact that the federal food law, which is but seven years old, has been extensively advertised, the reports of the prosecutions of the Department of Agriculture and the disposition of decomposed samples being published in a somewhat sensational manner in the newspapers. Furthermore, many sensational and untrue statements about our food supply have been published in papers and magazines. During the period from Jan. 1, 1907, to Dec. 31, 1912, the Department of Agriculture has reported the completion of 2,391 prosecutions under the United States food and drug act of 1906, and during the same period the Massachusetts State Board of Health has made 1,601 prosecutions for violations of the Massachusetts food laws, — nearly two-thirds as many as the national authorities have made. When one considers that the United States Department of Agriculture operated during this time the general laboratory in Washington and twenty-one branch laboratories, many of which were larger than the food laboratory of the State Board of Health, it is surprising that the number of prosecutions carried on by the State is so large.

State food laws deal with sales made within the State, and the national law deals with sales made between the States; both laws are independent of each other. The New Hampshire law cannot prevent the manufacturer in that State from shipping adulterated food into Massachusetts, and the United States law cannot easily convict a person who ships to himself or to his partner although goods so shipped may be subject to seisure and confiscation; but under the Massachusetts law the person selling such food in this State can be prosecuted. This illustration shows the vital necessity of State laws, which, as a rule, owing to local conditions, cannot be in uniformity with the national law. Shortly after the passage of the United States law many States enacted a law modeled upon it almost verbatim, yet to-day hardly a State possesses a law uniform with the national law, owing to the necessary changes made by the different States.

There was published in the report for 1912 a chart, reproduced below, showing the variation in adulteration of samples of milk, foods, exclusive of milk, spices and drugs, examined by the Board during thirty years. A chart of this nature naturally would give a false impression of the amount of adulterated matter upon the market, owing to the fact that particular attention was paid to the collection and examination of those substances which experience has shown to be most liable to adulteration. Furthermore, large numbers of samples are collected from suspected persons, which practice has a tendency to increase above the normal the ratio of adulteration of the samples examined. This chart shows the value of inspection, however, for one can readily perceive what would happen if inspection were to cease.

The actual value of the work of the department in suppressing adulteration can be shown by the statistics of those classes of food which have been examined continuously during a period of years by the same methods of analysis. For this purpose the statistics of honey,



Ratio of adulteration of milk, foods and drugs during thirty years.

cream of tartar, coffee, molasses and spices have been chosen, and the results are shown in the accompanying chart. Honey, cream of tartar and spices have been examined for thirty-one years. No adulterated samples of spice and honey have been obtained in eight years, and of cream of tartar during three years. The largest amount of adulterated spices was obtained in 1883, when two-thirds of the samples were adulterated. After five years the adulteration of spices was reduced to less than one-fifth, and since 1908 it has been *nil.* The large majority of the adulterated samples of spices were manufactured outside this State, and in such cases warning letters were sent to the dealers, — prosecution being resorted to only when the dealers did not heed the warning. In the collection of such food as spices the inspectors soon became acquainted with the reliable brands, and from dealers carrying such goods no samples were taken.

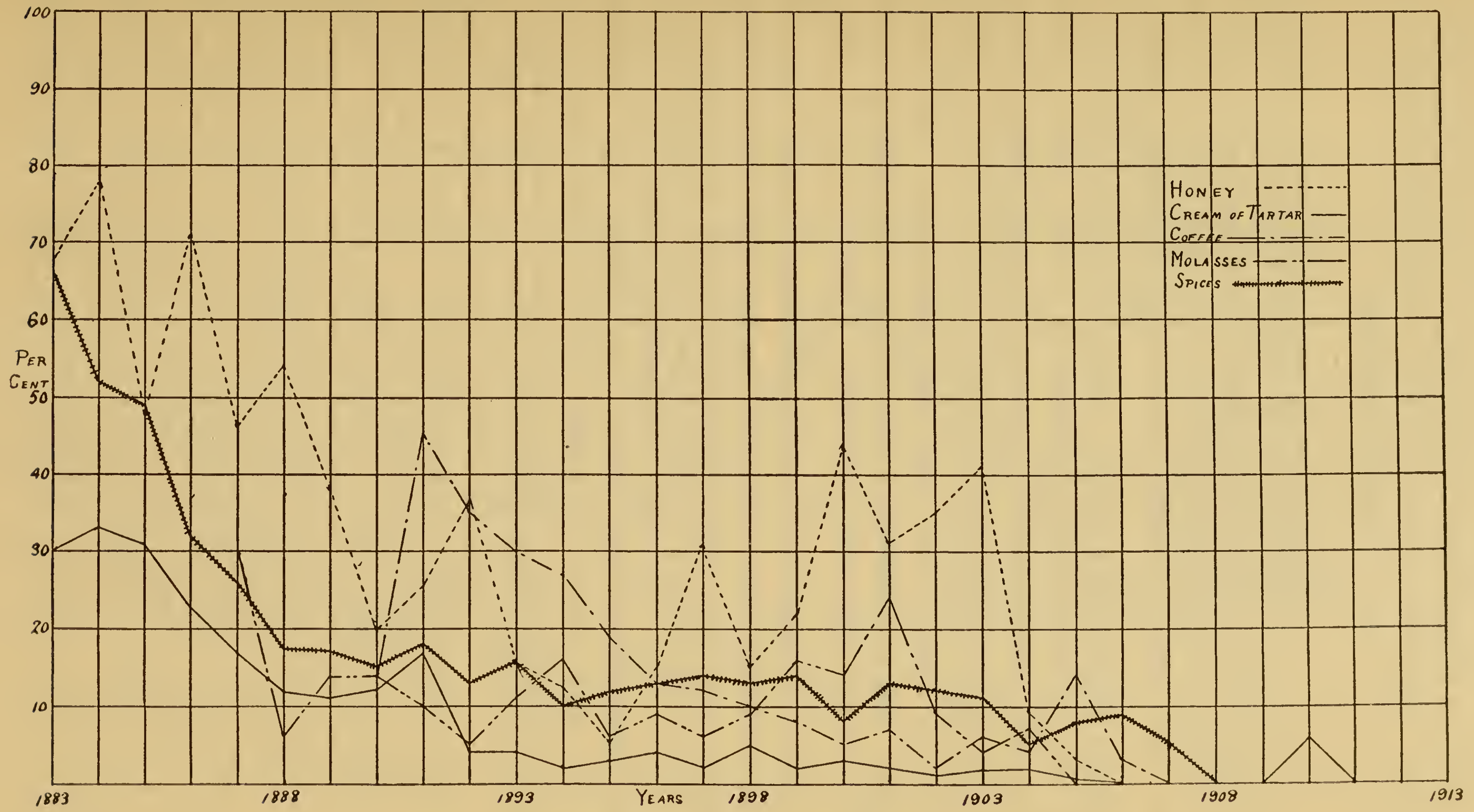
A single sample of honey was reported adulterated in the report for 1912 and is not recorded in the chart. This sample was alleged to be a honey substitute by the vendor, but was not labeled in strict compliance with the State law. During 1910 four samples of cream of tartar were reported adulterated, of which three were sold as cream of tartar substitutes, without any statement of the per cent. of ingredients, and have not been included in the chart. The other sample is included in the chart, and was in a can, which, judging from its appearance, may have been on the shelf of the dealer for a number of years.

Coffee has been examined continuously since 1890, and the highest amount of adulteration (45 per cent.) occurred in 1890. For six years no sales of adulterated coffee have been obtained when coffee was asked for. A number of samples of compound coffee have been obtained, but in all these cases compound coffee has been asked for, and the packages have been labeled "compound coffee;" but in many instances the per cent. of the ingredients, as required by law, have not been stated upon the package. These sales of compound coffee are not included in the chart.

Molasses has been examined for the presence of glucose since 1887. Previous to that time the examination had been confined to the detection of tin salts used in clarifying and decolorizing dark, thick molasses. Since 1907 no illegal sales of molasses containing glucose have been obtained in this State by our inspectors.

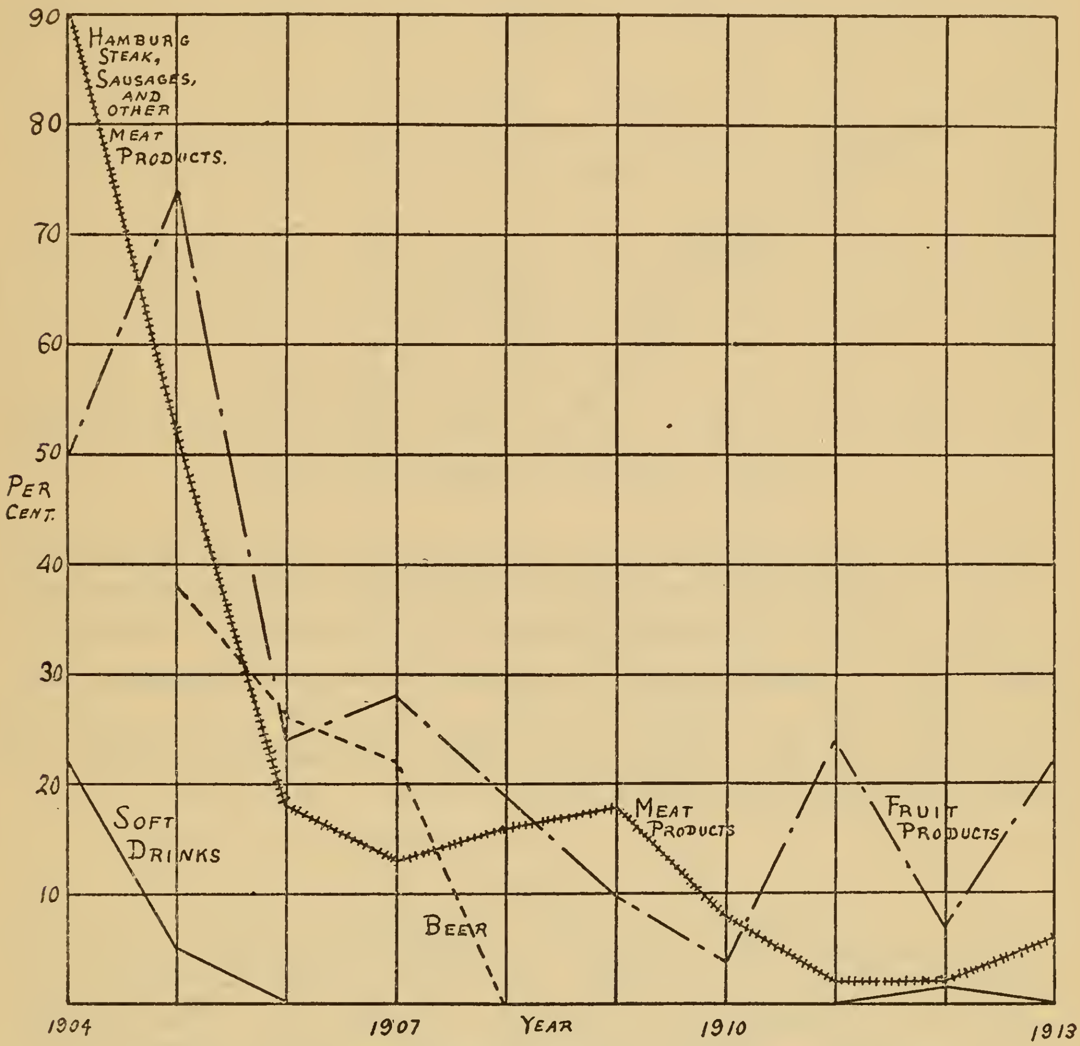
PRESERVED FOODS.

Since 1904 certain classes of food have been systematically examined for preservatives, and the results of these examinations are shown in the chart. The percentage of adulterated samples does not show the



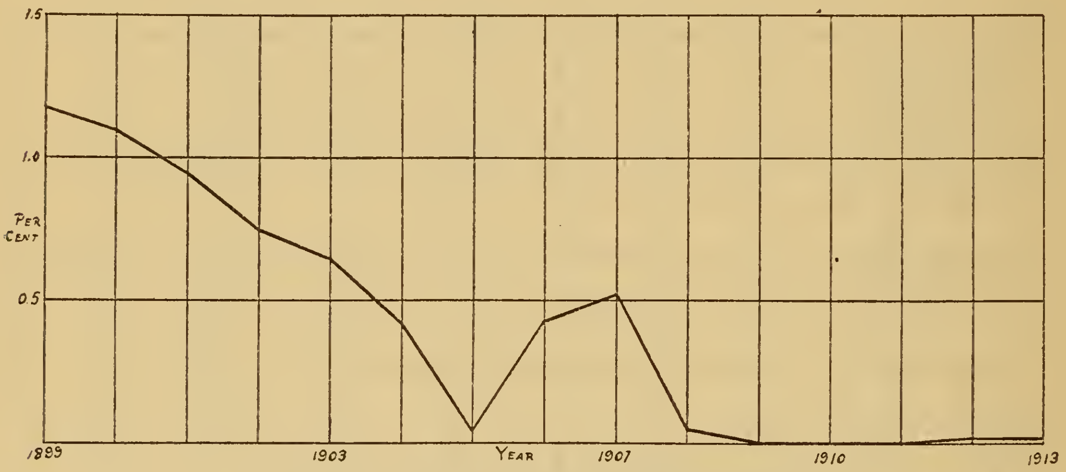
Ratio of adulteration of certain food samples during thirty-one years.

extent of the use of preservatives in these foods, but shows the per cent. of samples containing these substances when sold without the necessary label stating the name and per cent. of the added preservatives. Certain classes of food, such as hamburg steak and sweet cider, invariably contain antiseptics, unless the article is prepared in the presence of the customer. In fact, it would be impossible to sell in a grocery store sweet cider free from preservatives unless the cider was sterilized and bottled in that condition, as the presence of alcohol would in one or two days become sufficient to render the dealer liable under the liquor law for selling an intoxicating beverage without a license. The use of a preservative in hamburg steak is principally for the purpose of preventing the meat from becoming dark upon standing. Sodium sulphite is used for this purpose in amounts from



Per cent. of food samples containing antiseptics sold in violation of the law.

0.5 to 1 per cent., although occasionally samples have been found containing as much as 2 per cent. Meat treated with this substance will retain its bright red color until the antiseptic is destroyed. Recently sodium benzoate has been to some extent substituted for sodium sulphite in this article of food. With the exception of these two substances the use of antiseptics in food is declining. In the foods in which the presence of antiseptics was formerly the rule, such as sausages, clams, oysters and beer, these substances now are very rarely found, and the use of preservatives is diminishing in jams, ketchup, canned and bottled fruit products, in which antiseptics are unnecessary for commercial preservation. The use of antiseptics in milk has practically ceased, as shown in the accompanying chart. Since 1908 but two samples of preserved milk have been found in this laboratory, one sample during 1912 and one during 1913, both of which contained formaldehyde.



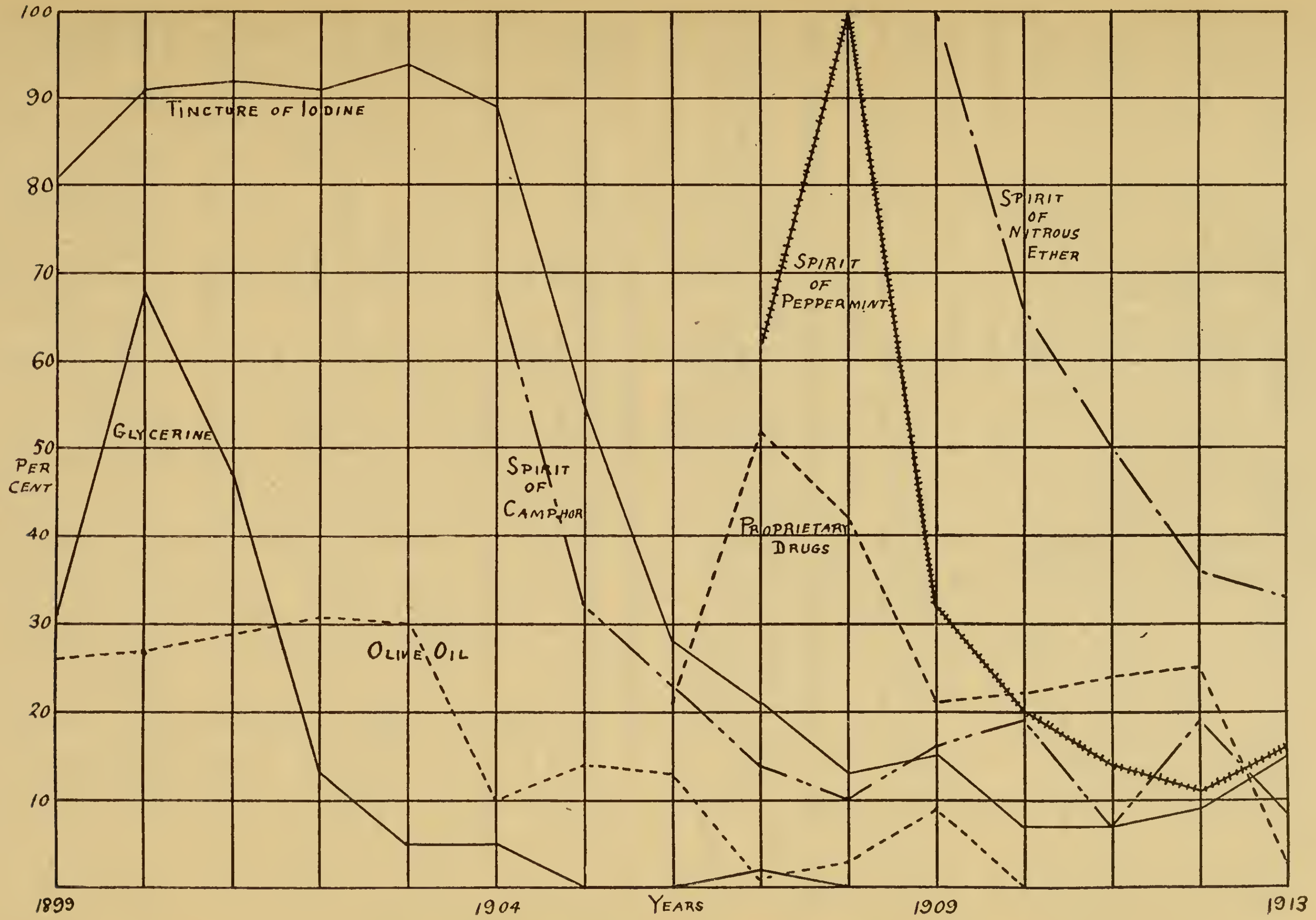
Per cent. of milk samples containing preservatives.

Drugs.

Drugs must conform to certain standards laid down in books on materia medica, one of which, the United States Pharmacopœia, is specifically mentioned in the statutes. If a sample of drug is deficient to the standard, although its deficiency is too slight to substantiate a prosecution in court, the records of the department must show it to be adulterated. For this reason drugs would naturally show a higher ratio of adulteration than foods which, with the exception of milk and vinegar, need not conform with specific standards, but this does not account for the excessive adulteration found in drugs, the only explanation of which would be fraud, incompetency or carelessness. It is of course manifestly impossible to expect all drugs prepared by the retail dealers to be exactly standard, and a reasonable allowance must be made for possible errors in manufacture. For example, spirit of peppermint should contain 10 per cent. by volume of peppermint oil. If two samples were examined and found to contain 9.7 per cent. and 5 per cent. of peppermint oil, respectively, they must both be classed as adulterated, although the former is for all practical purposes pure, and the latter is adulterated to an extent of 50 per cent. One of these samples should be the subject of a prosecution, and the other is not even poor enough to merit the sending of a warning letter to the dealer from whom it was obtained. It has been the practice in this State to obtain for analysis a number of drugs which are prepared by the retail druggists, experience having shown that the largest amount of fraudulent adulteration and substitution is practiced by the small dealers. Judging from the rapidity of the improvement in the quality of the drugs examined, it would appear as if the druggists watch the bulletins of the State Board of Health to find out what particular drugs are being examined, because after the publication of the results of the first prosecution of a drug the character of which has been but recently investigated, the sale of pure and full-strength samples of this particular drug increases with great rapidity. For this reason changes in the character of drugs examined are necessary, and there has been no one variety of drug that has been examined continuously since the department has been organized; consequently, a drug chart similar to that of foods could not be prepared.

Tincture of iodine has been examined for a longer period than any other drug, and since 1904 the ratio of adulteration has been brought down from 90 to 15 per cent. Since 1908 from 7 to 15 per cent. of the samples contained less than the required 7 grams of iodine per 100 cubic centimeters. Notwithstanding this, during the same period the average sample contained from 96 to 99 per cent. and the average adulterated sample contained from 77 to 84 per cent. of the required amount of iodine. During the years 1898–1904 from 81 to 84 per cent. of the samples were below the standard, the average bad sample containing from 63 to 75 per cent. and the average of all samples containing from 76 to 88 per cent. of the required amount of iodine. The improvement in the quality of this drug appears to have been extended to the adulterated samples, caused by the presence of a less number of the highly deficient and a proportionately greater number of the slightly deficient samples. Similar conditions exist in the statistics of the other pharmacopœial preparations listed in the chart.

The glycerine statistics are of unusual interest. During 1899 it was found that the glycerine on the market contained considerable arsenic,



Ratio of adulteration of certain drugs during fifteen years.

and as nearly all of this drug came from outside the State, notification rather than prosecution (of which latter there was but one) was resorted to for the purpose of purifying the drug. The increase in adulteration during the second year is due to the fact that the examination for arsenic in 1899 was begun in the middle of the year and the samples not examined for arsenic were reported as good, which lowered the ratio of adulteration for the year. At that time the United States Pharmacopœia did not specify that glycerine should be free from arsenic, and the fact that the Massachusetts market was practically cleared of the arsenical preparation before the publication of the 1900 Pharmacopœia speaks well both for the work of the department and of the co-operation of the manufacturers in the country, who changed their process of manufacture so that the pharmacopœial glycerine was made arsenic free.

Proprietary Medicines.

Year.	Samples found Good.	Number of Samples containing —					Total.
		Cocaine.	Morphine.	Acetanilide.	Alcohol.	Chloroform.	
1906, ...	69	18	–	–	–	–	87
1907, ...	84	87	4	–	–	–	175
1908, ...	165	83	4	22	9	–	283
1909, ...	73	2	–	4	13	–	92
1910, ...	43	1	–	3	8	–	55
1911, ...	51	–	6	4	6	–	67
1912, ...	44	–	–	–	13	2	59
1913, ...	33	–	–	–	1	–	34

The proprietary medicine law was enacted in 1906, but was written in such a manner that except in those portions relating to cocaine it was practically useless. This law was amended in a satisfactory manner in 1907 and went into effect in 1908. For these reasons the most attention was given during 1906 and 1907 to the preparations in which cocaine might be used, and of 87 samples obtained in 1906, 78 were suspected of containing cocaine, in 18 of which the drug was present. In 1907 no collections were made of those medicines shown by the previous year's work to contain no objectional substances, and a vigorous campaign was carried on against the sale of medicine known to contain cocaine. This was continued during 1908 and 1909, the results of which is that it is now almost impossible to purchase cocaine in a drug store in this State without a prescription from a physician; and, furthermore, proprietary drugs containing this substance have been eliminated from the Massachusetts market. In most instances the law requiring the per cent. of morphine to be labeled upon the package has been lived up to, and the dealers in headache powders have now complied with the laws requiring that the amount of acetanilide and phenacetin in such substances shall be stated upon the label of the package. The fact that the proprietary medicines are at present sold in compliance with the law does not mean that the evils of the drug habit have been eliminated. Habitual users of drugs obtain a supply in some manner, as is shown by the amount of such substances which has been found upon the persons of prisoners and submitted to this Board by the police. These are not, however, proprietary drugs, but are either the pure chemicals or are tablets containing them. It appears to be impossible for a nonuser of these drugs to purchase them without a prescription in those stores the proprietors of which illegally sell such substances to their regular customers, who naturally are known to the dispensers as habitual users of drugs. The drugs sold on the streets by pedlers are of the same nature as those dispensed in certain disreputable drug stores.

Notwithstanding the fact that the traffic in hypnotic drugs is not what all would desire, the present state of affairs is an immense improvement over conditions a few years ago, when alleged catarrh powders, asthma remedies, etc., containing cocaine were frequently sold in this State, and many persons innocently acquired the drug habit by using them in good faith as medicines. If a person uses hypnotic drugs to-day he must first obtain the drug, no doubt illegally, with certain knowledge of the nature of the substance he is using.

STATEMENT CONCERNING PICKLES SOLD BY THE LUTZ & SCHRAMM COMPANY.

In the January (1914) Bulletin of this Board the statement was made that pickles sold by the Central Cash Market in Lynn and found to contain alum had been bought from the Lutz & Schramm Company.

This information, furnished by the clerk of the Central Cash Market, was found on further investigation to be incorrect, the pickles having been furnished by another concern.

THE SALE OF EGGS TAKEN FROM COLD STORAGE.

Acts of 1913, Chapter 538, amended by Acts of 1914, Chapter 545.

An Act relative to the sale of eggs taken from cold storage.

Section 1. Whenever eggs that have been in cold storage are sold at wholesale or retail, or offered or exposed for sale, the basket, box or other container in which the eggs are placed shall be marked plainly and conspicuously with the words "cold storage eggs", or there shall be attached to such container a placard or sign having on it the said words. If eggs that have been in cold storage are sold at retail or offered or exposed for sale without a container, or placed upon a counter or elsewhere, a sign or placard, having the words "cold storage eggs" plainly and conspicuously marked upon it, shall be displayed in, upon or immediately above the said eggs; the intent of this act being that cold storage eggs sold or offered or exposed for sale shall be designated in such a manner that the purchaser will know that they are cold storage eggs. The display of the words "cold storage eggs", as required by this act, shall be in letters not less than one inch in height and shall be done in such a manner as is approved by the state board of health.

Section 2. Violation of any provision of this act shall be punished by a fine of not less than ten dollars nor more than five hundred dollars for each offence.

At a meeting of the State Board of Health held Aug. 7, 1913, it was voted to modify the regulation made June 5, 1913, to read as follows: —

The sign or placard required by section 1 of chapter 538 of the Acts of 1913 to be placed upon or immediately above cold storage eggs, or upon the basket, box or other container in which cold storage eggs are placed, shall consist of the words "Cold Storage Eggs", printed in uncondensed Gothic type, in letters not less than one inch in height, printed in black on a white background, no other lettering to appear on or to be attached to said sign or placard. (This sign or placard to be used only where eggs are offered or exposed for sale.)

On July 2, 1914, the State Board of Health voted to make the following regulation concerning the proper marking of cold storage eggs when delivered to a purchaser: —

The marking required by section 1 of chapter 538 of the Acts of 1913, as amended by chapter 545 of the Acts of 1914, to be placed upon the bag, basket, box or other container in which cold storage eggs are placed, after having been sold, shall consist of the words "Cold Storage Eggs," printed or stamped in legible letters not less than one inch in height, in black, purple or red ink, no other lettering to appear in connection with the words "Cold Storage Eggs." (This method of marking to appear on the bag, basket, box or other container in which eggs are delivered to the purchaser, and on all containers of eggs when sold at wholesale.)

NEW LEGISLATION.

Acts of 1914, Chapter 694.

An Act to regulate the sale of opium, morphine and other narcotic drugs.

Section 1. On and after the first day of January, nineteen hundred and fifteen, it shall be unlawful for any person, firm or corporation to sell, furnish, give away or deliver any opium, morphine, heroin, codeine, cannabis indica, cannabis sativa, or any preparation thereof, or any salt or compound of the said substances, except upon the written prescription or written order of a registered physician, dentist, or veterinary surgeon, bearing the name of the physician, dentist, or veterinary surgeon giving it, which prescription when filled shall show the date of each filling and shall be retained on file by the druggist filling it for a period of at least two years, and it shall not again be filled except upon the order of the prescriber, given in person or in writing. The prescription shall not be copied, except for the purpose of record by the druggist filling the same, and it shall at all times be open to inspection by the officers of the state board of health, the board of registration in pharmacy and its authorized agents, and by the police authorities and police officers of cities and towns. But the provisions of this act shall not apply to prescriptions, nor to the sale, distribution, giving away, or dispensing of preparations and remedies, if such prescriptions, preparations or remedies do not contain more than two grains of opium or more than one quarter of a grain of morphine, or more than one quarter of a grain of heroin, or more than one grain of codeine, or more than one half of a grain of extract of cannabis indica, or more than one half of a grain of extract of cannabis sativa, or any salt or compound of any of them in one fluid ounce, or, if a solid or semi-solid preparation, to the avoirdupois ounce; nor to liniments, ointments or other preparations which are prepared for external use only; nor to preparations containing any of the said substances which are sold in good faith for diarrhœa or cholera or neuralgia, and which do not contain more than six grains of opium or more than three quarters of a grain of morphine to each fluid ounce, or, if a solid or semi-solid preparation, to the avoirdupois ounce; nor to Dover's Powder; nor to veterinary preparations containing not over ten grains of opium or more than one grain and a quarter of morphine to each fluid ounce, or, if a solid or semi-solid preparation, to the avoirdupois ounce; nor to compound medicinal tablets, pills or powders containing not over one twentieth of a grain of morphine or one quarter of a grain of codeine or any of their salts, except heroin, to each pill, powder, or tablet: *provided,* that such preparations, remedies or prescriptions are sold, distributed, given away or dispensed in good faith as medicines, and not sold for the purpose of evading the provisions of this act.

Section 2. It shall be unlawful for any practitioner of veterinary medicine or surgery to prescribe any of the drugs mentioned in section one of this act for the use of a human being, and it shall be unlawful for any physician or dentist to prescribe, sell, give away or deliver any opium, morphine, heroin, codeine, cannabis indica, cannabis sativa, or any preparation thereof, or any salt or compound of said substance to any person known to such physician or dentist to be an habitual user of those drugs.

Section 3. The provisions of this act shall not be construed to prevent any lawfully authorized practitioner of medicine or of veterinary medicine or of dentistry from prescribing, administering or dispensing any drug that may be indicated for any patient under his care; *provided,* that such prescribing, administering or dispensing is not for the purpose of evading the provisions of this act; and *provided, further,* that every physician, veterinarian and dentist shall keep a record in a suitable book of the names and addresses of all patients to whom he dispenses narcotics.

Section 4. Any manufacturer or jobber and any wholesale druggist and any registered pharmacist, physician, veterinarian or dentist may sell opium, morphine, codeine, heroin, cannabis indica, cannabis sativa, or any preparation thereof, or any salt or compound of such substances to any manufacturer, jobber, wholesale druggist, registered pharmacist, physician, veterinarian or dentist, or to any incorporated hospital; but such substances or preparations, except such as are included within the exemptions set forth in section one, shall be sold only upon a written order duly signed by such manufacturer, jobber, wholesale druggist, pharmacist, physician, veterinarian, dentist or superintendent of such incorporated hospital, which order shall state the article or articles ordered and the date. The said orders shall be kept on file in the laboratory, warehouse, pharmacy or store in which they are filled by the proprietor thereof, or his successors, for a period of not less than two years from the date of delivery, and shall be at all times open to inspection by officers of the state board of health, members of the board of registration in pharmacy, or their authorized agents, and by the police authorities and police officers of cities and towns.

Section 5. Any person who, for the purpose of evading or assisting in the evasion of any provision of this act shall falsely represent that he is a physician, dentist or veterinarian, or that he is a manufacturer, jobber, wholesale druggist, or pharmacist, or an agent or employee of an incorporated hospital, or who, not being an authorized physician, dentist or veterinarian, makes or alters a prescription for any of the said substances, shall be deemed guilty of a violation of this act.

SECTION 6. Whoever violates any provision of this act shall be deemed guilty of a misdemeanor, and shall be punished by a fine of not less than fifty nor more than one thousand dollars, or by imprisonment in the house of correction or jail for a term not exceeding one year, or by both such fine and imprisonment.

SECTION 7. Chapter two hundred and seventy-one of the acts of the year nineteen hundred and ten is hereby repealed. [*Approved June 22, 1914.*

ACTS OF 1914, CHAPTER 744.

AN ACT RELATIVE TO THE PRODUCTION AND SALE OF MILK.

SECTION 1. It shall be unlawful for any producer of milk or dealer in milk to sell or deliver for sale in any city or town in the commonwealth any milk produced or dealt in by him without first obtaining from the board of health of such city or town a permit authorizing such sale or delivery. Said boards of health are hereby authorized to issue such permits after an inspection, satisfactory to them, of the place in which and of the circumstances under which such milk is produced, has been made by them or by their authorized agent. Any permit so granted may contain such reasonable conditions as said board may think suitable for protecting the public health and may be revoked for failure to comply with any of such conditions. No charge shall be made to the producer for the permit or for the inspection of the dairy where the milk is produced.

SECTION 2. In case any permit so granted is revoked, the board revoking the permit shall immediately send notice of the revocation to the state board of health, and the state board of health shall at once inform the boards of health of other cities and towns in the commonwealth where, in its judgment, milk produced by the dairy to which the permit relates would be likely to be sold or delivered for sale, and the state board of health shall also give notice of such revocation to any dealer in milk who, in the judgment of the board, would be likely to purchase milk from such dairy; and upon receipt of such notice it shall be unlawful for any dealer so notified to sell or offer for sale in this commonwealth milk from the said dairy.

SECTION 3. After a permit has been revoked, it may be renewed in the same way in which the original permit was issued, in which case the same form of notification shall follow as is required in the issuance of the original permit.

SECTION 4. Any person, firm or corporation violating any provision of this act shall be punished by a fine of not more than one hundred dollars for each offence.

SECTION 5. It shall be the duty of the state board of health to enforce the provisions of section two of this act.

SECTION 6. It shall be the duty of the inspectors of milk appointed by the boards of health of cities and towns to enforce the provisions of section one, so far as relates to the milk supply of their respective cities and towns. [*Approved July 3, 1914.*

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OF

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Approved by
The State Board of Publication.

RETURNS OF DISEASES.

Cases of Diseases declared by the State Board of Health to be Dangerous to the Public Health.

[Under the provisions of section 52 of chapter 75 of the Revised Laws.]

DISEASE.	Week ending —				
	July 4.	July 11.	July 18.	July 25.	Total.
Diphtheria,	88	125	96	94	403
Measles,	215	204	129	101	649
Scarlet fever,	108	124	77	73	382
Typhoid fever,	25	27	27	50	129
Tuberculosis, pulmonary (or not classified),	129	107	118	142	496
Tuberculous meningitis,	7	3	3	6	19
Tuberculosis, other forms,	4	12	5	5	26
Cerebro-spinal meningitis,	3	4	3	3	13
Whooping cough,	53	65	4	57	179
Varicella,	40	43	29	34	146
Ophthalmia neonatorum,	42	68	61	54	225
Anterior poliomyelitis,	2	1	2	3	8
Smallpox,	7	6	–	1	14
Tetanus,	–	4	1	2	7
Trachoma,	–	–	1	2	3
Malignant pustule,	2	–	–	1	3

Cases of Infectious Diseases not included in the Above Table.

[Cases not notifiable under the provisions of section 52 of chapter 75 of the Revised Laws.]

DISEASE.	Week ending —				
	July 4.	July 11.	July 18.	July 25.	Total.
Mumps,	4	3	5	7	19
Tonsillitis,	–	7	1	–	8
Diarrhœa,	–	1	1	–	2
Bronchitis,	–	1	–	–	1
Ph. myocarditis,	–	–	1	–	1

RETURNS OF DEATHS.

Deaths from Diseases declared by the State Board of Health to be Dangerous to the Public Health in Cities and Towns of More than 10,000 Population.

[Under the provisions of chapter 210, Acts of 1913.]

Week ending July 4, 1914.

CITIES AND TOWNS.	Population. Census for 1910.	Total Number reported.	Tuberculosis, Pulmonary (or not classified).	Tuberculous Meningitis.	Tuberculosis, Other Forms.	Diphtheria.	Typhoid Fever.	Scarlet Fever.	Measles.	Whooping Cough.	Cerebro-spinal Meningitis.
Boston, ...	686,092	33[1] 35[2]	19[1] 20[2]	2[1] 2[2]	1[1] 1[2]	5[1] 5[2]	– –	1[1] 1[2]	4[1] 5[2]	1[1] 1[2]	– –
Worcester, ...	145,986	7	7	–	–	–	–	–	–	–	–
Fall River, ...	119,295	8	3	2	–	1	1	1	–	–	–
Lowell, ...	106,294	3	3	–	–	–	–	–	–	–	–
Cambridge, ...	104,839	2	2	–	–	–	–	–	–	–	–
New Bedford, ...	96,652	5	4	1	–	–	–	–	–	–	–
Lynn, ...	89,336	1	1	–	–	–	–	–	–	–	–
Springfield, ...	88,926	3	2	–	–	–	1	–	–	–	–
Lawrence, ...	85,892	–	–	–	–	–	–	–	–	–	1
Somerville, ...	77,236	2	1	–	–	–	–	1	–	–	–
Holyoke, ...	57,730	5	4	–	–	–	–	–	–	–	–
Brockton, ...	56,878	2	–	–	2	–	–	–	–	–	–
Malden, ...	44,404	–	–	–	–	–	–	–	–	–	–
Haverhill, ...	44,115	2	2	–	–	–	–	–	–	–	–
Salem, ...	43,697	–	–	–	–	–	–	–	–	–	–
Newton, ...	39,806	1	1	–	–	–	–	–	–	–	–
Fitchburg, ...	37,826	1	1	–	–	–	–	–	–	–	–
Taunton, ...	34,259	2	1	–	–	1	–	–	–	–	–
Everett, ...	33,484	–	–	–	–	–	–	–	–	–	–
Quincy, ...	32,642	–	–	–	–	–	–	–	–	–	–
Chelsea, ...	32,452	2	–	1	1	–	–	–	–	–	–
Pittsfield, ...	32,121	–	–	–	–	–	–	–	–	–	–
Waltham, ...	27,834	1	–	1	–	–	–	–	–	–	–
Brookline, ...	27,792	–	–	–	–	–	–	–	–	–	–
Chicopee, ...	25,401	1	–	1	–	–	–	–	–	–	–
Gloucester, ...	24,398	–	–	–	–	–	–	–	–	–	–
Medford, ...	23,150	–	–	–	–	–	–	–	–	–	–
North Adams, ...	22,019	–	–	–	–	–	–	–	–	–	–
Northampton, ...	19,431	–	–	–	–	–	–	–	–	–	–
Beverly, ...	18,650	–	–	–	–	–	–	–	–	–	–
Revere, ...	18,219	–	–	–	–	–	–	–	–	–	–
Leominster, ...	17,580	–	–	–	–	–	–	–	–	–	–
Attleborough, ...	16,215	–	–	–	–	–	–	–	–	–	–
Westfield, ...	16,044	1[1] 2[2]	–[1] 1[2]	– –	– –	1[1] 1[2]	– –	– –	– –	– –	– –
Peabody, ...	15,721	–	–	–	–	–	–	–	–	–	–
Melrose, ...	15,715	–	–	–	–	–	–	–	–	–	–
Woburn, ...	15,308	–	–	–	–	–	–	–	–	–	–
Newburyport, ...	14,949	–	–	–	–	–	–	–	–	–	–
Gardner, ...	14,699	–	–	–	–	–	–	–	–	–	–
Marlborough, ...	14,579	–	–	–	–	–	–	–	–	–	–
Clinton, ...	13,075	–	–	–	–	–	–	–	–	–	–
Milford, ...	13,055	–	–	–	–	–	–	–	–	–	–
Adams, ...	13,026	–	–	–	–	–	–	–	–	–	–
Framingham, ...	12,948	–	–	–	–	–	–	–	–	–	–
Weymouth, ...	12,895	–	–	–	–	–	–	–	–	–	–
Watertown, ...	12,875	–	–	–	–	–	–	–	–	–	–
Southbridge, ...	12,592	–	–	–	–	–	–	–	–	–	–
Plymouth, ...	12,141	–	–	–	–	–	–	–	–	–	–
Webster, ...	11,509	–	–	–	–	–	–	–	–	–	–
Methuen, ...	11,448	–	–	–	–	–	–	–	–	–	–
Wakefield, ...	11,404	–	–	–	–	–	–	–	–	–	–
Arlington, ...	11,187	1	–	–	1	–	–	–	–	–	–
Greenfield, ...	10,427	–	–	–	–	–	–	–	–	–	–
Winthrop, ...	10,132	–	–	–	–	–	–	–	–	–	–
Total of reporting towns, . .	1,898,188	86	53	8	5	8	2	3	5	1	1

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[1] Nonresidents deducted.

[2] Total deaths.

Week ending July 11, 1914.

CITIES AND TOWNS.	Population. Census for 1910.	Total Number reported.	Tuberculosis, Pulmonary (or not classified).	Tuberculous Meningitis.	Tuberculosis, Other Forms.	Diphtheria.	Typhoid Fever.	Scarlet Fever.	Measles.	Whooping Cough.	Cerebro-spinal Meningitis.
Boston,	686,092	27[3] 29[4]	17[1] 18[2]	2[1] 2[2]	– –	1[1] 1[2]	– –	2[1] 2[2]	– –	2[1] 2[2]	2[1] 2[2]
Worcester,	145,986	8	3	3	–	–	–	–	1	1	–
Fall River,	119,295	6	4	–	–	–	1	–	–	1	–
Lowell,	106,294	8	2	1	1	–	2	–	–	–	2
Cambridge,	104,839	3	3	–	–	–	–	–	–	–	–
New Bedford,	96,652	2	1	–	–	1	–	–	–	–	–
Lynn,	89,336	5	3	–	1	–	–	–	–	–	1
Springfield,	88,926	3	1	–	–	–	2	–	–	–	–
Lawrence,	85,892	–	–	–	–	–	–	–	–	–	–
Somerville,	77,236	2	–	2	–	–	–	–	–	–	–
Holyoke,	57,730	2	1	1	–	–	–	–	–	–	–
Brockton,	56,878	2	1	–	–	–	–	–	–	–	1
Malden,	44,404	1	–	–	–	–	–	1	–	–	–
Haverhill,	44,115	3	3	–	–	–	–	–	–	–	–
Salem,	43,697	–	–	–	–	–	–	–	–	–	–
Newton,	39,806	–	–	–	–	–	–	–	–	–	–
Fitchburg,	37,826	2	2	–	–	–	–	–	–	–	–
Taunton,	34,259	2	2	–	–	–	–	–	–	–	–
Everett,	33,484	2	2	–	–	–	–	–	–	–	–
Quincy,	32,642	–	–	–	–	–	–	–	–	–	–
Chelsea,	32,452	1	1	–	–	–	–	–	–	–	–
Pittsfield,	32,121	1	–	–	–	1	–	–	–	–	–
Waltham,	27,834	–	–	–	–	–	–	–	–	–	–
Brookline,	27,792	–	–	–	–	–	–	–	–	–	–
Chicopee,	25,401	1	–	1	–	–	–	–	–	–	–
Gloucester,	24,398	–	–	–	–	–	–	–	–	–	–
Medford,	23,150	1	–	–	–	–	–	–	–	1	–
North Adams,	22,019	–	–	–	–	–	–	–	–	–	–
Northampton,	19,431	–	–	–	–	–	–	–	–	–	–
Beverly,	18,650	2	1	–	–	1	–	–	–	–	–
Revere,	18,219	–	–	–	–	–	–	–	–	–	–
Leominster,	17,580	1	–	–	–	1	–	–	–	–	–
Attleborough,	16,215	–	–	–	–	–	–	–	–	–	–
Westfield,	16,044	–[1] 2[2]	–[1] 2[2]	– –	– –	– –	– –	– –	– –	– –	– –
Peabody,	15,721	–	–	–	–	–	–	–	–	–	–
Melrose,	15,715	1	1	–	–	–	–	–	–	–	–
Woburn,	15,308	–	–	–	–	–	–	–	–	–	–
Newburyport,	14,949	–	–	–	–	–	–	–	–	–	–
Gardner,	14,699	–	–	–	–	–	–	–	–	–	–
Marlborough,	14,579	–	–	–	–	–	–	–	–	–	–
Clinton,	13,075	–	–	–	–	–	–	–	–	–	–
Milford,	13,055	–	–	–	–	–	–	–	–	–	–
Adams,	13,026	–	–	–	–	–	–	–	–	–	–
Framingham,	12,948	–[1] 1[2]	– –	– –	– –	– –	– –	– –	– –	– –	–[1] 1[2]
Weymouth,	12,895	–	–	–	–	–	–	–	–	–	–
Watertown,	12,875	–	–	–	–	–	–	–	–	–	–
Southbridge,	12,592	–	–	–	–	–	–	–	–	–	–
Plymouth,	12,141	–	–	–	–	–	–	–	–	–	–
Webster,	11,509	–	–	–	–	–	–	–	–	–	–
Methuen,	11,448	1	1	–	–	–	–	–	–	–	–
Wakefield,	11,404	–	–	–	–	–	–	–	–	–	–
Arlington,	11,187	–	–	–	–	–	–	–	–	–	–
Greenfield,	10,427	–	–	–	–	–	–	–	–	–	–
Winthrop,	10,132	–	–	–	–	–	–	–	–	–	–
Total of reporting towns,	2,028,861	92	52	10	2	5	5	3	1	5	7

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[1] Nonresidents deducted.

[2] Total deaths.

[3] Nonresidents deducted: one death from tetanus.

[4] Total deaths: two deaths from tetanus.

Week ending July 18, 1914.

CITIES AND TOWNS.	Population. Census for 1910.	Total Number reported.	Tuberculosis, Pulmonary (or not classified).	Tuberculous Meningitis.	Tuberculosis, Other Forms.	Diphtheria.	Typhoid Fever.	Scarlet Fever.	Measles.	Whooping Cough.	Cerebro-spinal Meningitis.
Boston, ...	686,092	23[1] 27[3]	18[1] 19[2]	2[1] 3[2]	– –	2[1] 2[2]	– –	1[1] 1[2]	– –	– –	–[1] 1[2]
Worcester, ...	145,986	4	3	–	1	–	–	–	–	–	–
Fall River, ...	119,295	5	4	–	–	–	–	–	–	1	–
Lowell, ...	106,294	4	3	–	–	–	1	–	–	–	–
Cambridge, ...	104,839	2	2	–	–	–	–	–	–	–	–
New Bedford, ...	96,652	6	2	–	–	–	2	1	–	1	–
Lynn, ...	89,336	2	1	–	1	–	–	–	–	–	–
Springfield, ...	88,926	5	4	–	–	–	–	–	1	–	–
Lawrence, ...	85,892	–	–	–	–	–	–	–	–	–	–
Somerville, ...	77,236	1	1	–	–	–	–	–	–	–	–
Holyoke, ...	57,730	2	1	–	1	–	–	–	–	–	–
Brockton, ...	56,878	–	–	–	–	–	–	–	–	–	–
Malden, ...	44,404	1	–	–	–	–	–	–	–	1	–
Haverhill, ...	44,115	1	1	–	–	–	–	–	–	–	–
Salem, ...	43,697	–	–	–	–	–	–	–	–	–	–
Newton, ...	39,806	–	–	–	–	–	–	–	–	–	–
Fitchburg, ...	37,826	1	1	–	–	–	–	–	–	–	–
Taunton, ...	34,259	1	–	–	1	–	–	–	–	–	–
Everett, ...	33,484	1	1	–	–	–	–	–	–	–	–
Quincy, ...	32,642	–	–	–	–	–	–	–	–	–	–
Chelsea, ...	32,452	1	–	–	–	–	1	–	–	–	–
Pittsfield, ...	32,121	1	1	–	–	–	–	–	–	–	–
Waltham, ...	27,834	1	–	–	–	1	–	–	–	–	–
Brookline, ...	27,792	–	–	–	–	–	–	–	–	–	–
Chicopee, ...	25,401	1[4]	–	–	–	–	–	–	–	–	–
Gloucester, ...	24,398	–	–	–	–	–	–	–	–	–	–
Medford, ...	23,150	–	–	–	–	–	–	–	–	–	–
North Adams, ...	22,019	–	–	–	–	–	–	–	–	–	–
Northampton, ...	19,431	–	–	–	–	–	–	–	–	–	–
Beverly, ...	18,650	–	–	–	–	–	–	–	–	–	–
Revere, ...	18,219	–	–	–	–	–	–	–	–	–	–
Leominster, ...	17,580	–	–	–	–	–	–	–	–	–	–
Attleborough, ...	16,215	–	–	–	–	–	–	–	–	–	–
Westfield, ...	16,044	–	–	–	–	–	–	–	–	–	–
Peabody, ...	15,721	–	–	–	–	–	–	–	–	–	–
Melrose, ...	15,715	–	–	–	–	–	–	–	–	–	–
Woburn, ...	15,308	1	1	–	–	–	–	–	–	–	–
Newburyport, ...	14,949	1	1	–	–	–	–	–	–	–	–
Gardner, ...	14,699	–	–	–	–	–	–	–	–	–	–
Marlborough, ...	14,579	–	–	–	–	–	–	–	–	–	–
Clinton, ...	13,075	–	–	–	–	–	–	–	–	–	–
Milford, ...	13,055	–	–	–	–	–	–	–	–	–	–
Adams, ...	13,026	–	–	–	–	–	–	–	–	–	–
Framingham, ...	12,948	–	–	–	–	–	–	–	–	–	–
Weymouth, ...	12,895	–	–	–	–	–	–	–	–	–	–
Watertown, ...	12,875	–	–	–	–	–	–	–	–	–	–
Southbridge, ...	12,592	–	–	–	–	–	–	–	–	–	–
Plymouth, ...	12,141	–	–	–	–	–	–	–	–	–	–
Webster, ...	11,509	–	–	–	–	–	–	–	–	–	–
Methuen, ...	11,448	–	–	–	–	–	–	–	–	–	–
Wakefield, ...	11,404	–	–	–	–	–	–	–	–	–	–
Arlington, ...	11,187	–	–	–	–	–	–	–	–	–	–
Greenfield, ...	10,427	–	–	–	–	–	–	–	–	–	–
Winthrop, ...	10,132	–	–	–	–	–	–	–	–	–	–
Total of reporting towns, . .	1,914,539	68	46	3	4	3	4	2	1	3	1

[1] Nonresidents deducted.

[2] Total deaths.

[3] Total deaths: one death from tetanus.

[4] One death from anterior poliomyelitis.

Week ending July 25, 1914.

CITIES AND TOWNS.	Population. Census for 1910.	Total Number reported.	Tuberculosis, Pulmonary (or not classified).	Tuberculous Meningitis.	Tuberculosis, Other Forms.	Diphtheria.	Typhoid Fever.	Scarlet Fever.	Measles.	Whooping Cough.	Cerebro-spinal Meningitis.
Boston,	686,092	27[1] 29[2]	16[1] 16[2]	3[1] 4[2]	1[1] 1[2]	– –	– –	1[1] 1[2]	3[1] 4[2]	2[1] 2[2]	1[1] 1[2]
Worcester,	145,986	7	5	1	–	–	–	–	1	–	–
Fall River,	119,295	9	6	–	2	–	–	–	–	–	1
Lowell,	106,294	–	–	–	–	–	–	–	–	–	–
Cambridge,	104,839	3	3	–	–	–	–	–	–	–	–
New Bedford,	96,652	2	–	2	–	–	–	–	–	–	–
Lynn,	89,336	–	–	–	–	–	–	–	–	–	–
Springfield,	88,926	2	1	–	–	–	1	–	–	–	–
Lawrence,	85,892	–	–	–	–	–	–	–	–	–	–
Somerville,	77,236	3	1	–	–	–	–	–	2	–	–
Holyoke,	57,730	3[3]	1	1	–	–	–	–	–	–	–
Brockton,	56,878	–	–	–	–	–	–	–	–	–	–
Malden,	44,404	–	–	–	–	–	–	–	–	–	–
Haverhill,	44,115	1	1	–	–	–	–	–	–	–	–
Salem,	43,697	–	–	–	–	–	–	–	–	–	–
Newton,	39,806	–	–	–	–	–	–	–	–	–	–
Fitchburg,	37,826	–	–	–	–	–	–	–	–	–	–
Taunton,	34,259	1	–	–	–	–	–	1	–	–	–
Everett,	33,484	1	–	1	–	–	–	–	–	–	–
Quincy,	32,642	–	–	–	–	–	–	–	–	–	–
Chelsea,	32,452	1	1	–	–	–	–	–	–	–	–
Pittsfield,	32,121	1	–	–	–	–	1	–	–	–	–
Waltham,	27,834	–	–	–	–	–	–	–	–	–	–
Brookline,	27,792	–	–	–	–	–	–	–	–	–	–
Chicopee,	25,401	1	1	–	–	–	–	–	–	–	–
Gloucester,	24,398	–	–	–	–	–	–	–	–	–	–
Medford,	23,150	1	1	–	–	–	–	–	–	–	–
North Adams,	22,019	1	1	–	–	–	–	–	–	–	–
Northampton,	19,431	2	–	–	–	–	–	–	1	–	1
Beverly,	18,650	–	–	–	–	–	–	–	–	–	–
Revere,	18,219	1	1	–	–	–	–	–	–	–	–
Leominster,	17,580	–	–	–	–	–	–	–	–	–	–
Attleborough,	16,215	–	–	–	–	–	–	–	–	–	–
Westfield,	16,044	–	–	–	–	–	–	–	–	–	–
Peabody,	15,721	–	–	–	–	–	–	–	–	–	–
Melrose,	15,715	–	–	–	–	–	–	–	–	–	–
Woburn,	15,308	1	1	–	–	–	–	–	–	–	–
Newburyport,	14,949	–	–	–	–	–	–	–	–	–	–
Gardner,	14,699	–	–	–	–	–	–	–	–	–	–
Marlborough,	14,579	–	–	–	–	–	–	–	–	–	–
Clinton,	13,075	–	–	–	–	–	–	–	–	–	–
Milford,	13,055	–	–	–	–	–	–	–	–	–	–
Adams,	13,026	–	–	–	–	–	–	–	–	–	–
Framingham,	12,948	–	–	–	–	–	–	–	–	–	–
Weymouth,	12,895	–	–	–	–	–	–	–	–	–	–
Watertown,	12,875	–	–	–	–	–	–	–	–	–	–
Southbridge,	12,592	–	–	–	–	–	–	–	–	–	–
Plymouth,	12,141	–	–	–	–	–	–	–	–	–	–
Webster,	11,509	–	–	–	–	–	–	–	–	–	–
Methuen,	11,448	–	–	–	–	–	–	–	–	–	–
Wakefield,	11,404	–	–	–	–	–	–	–	–	–	–
Arlington,	11,187	1	1	–	–	–	–	–	–	–	–
Greenfield,	10,427	–	–	–	–	–	–	–	–	–	–
Winthrop,	10,132	–	–	–	–	–	–	–	–	–	–
Total of reporting towns,	1,687,902	71	41	9	3	–	2	2	8	2	3

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[1] Nonresidents deducted.

[2] Total deaths.

[3] One death from tetanus.

DEATHS FROM DISEASES DECLARED BY THE STATE BOARD OF HEALTH TO BE DANGEROUS TO THE PUBLIC HEALTH IN TOWNS OF LESS THAN 10,000 POPULATION.

[Under the provisions of chapter 210, Acts of 1913.]

DISEASE.	Place.	Week ending — July 4.	July 11.	July 18.	July 25.
Tuberculosis, pulmonary (or not classified).	Belmont,	1	–	–	–
	Bridgewater,	–	–	3	–
	Ipswich,	1	–	–	–
	Ludlow,	–	1	–	–
	Medfield,	2	–	–	–
	Needham,	–	1	–	–
	Stoneham,	1	–	–	–
	Whitman,	–	1	–	–
	Winchendon,	1	–	–	–
	Winchester,	1	–	–	–
Total,		7	3	3	–
Tuberculous meningitis,	Dedham,	–	1	–	–
	New Ashford,	–	–	1	–
Total,		–	1	1	–
Tuberculosis, other forms,	Bridgewater,	–	–	–	1
	Medfield,	–	–	–	1
Total,		–	–	–	2
Diphtheria,	Provincetown,	1	–	–	–
Measles,	Egremont,	–	–	1	–
Whooping cough,	North Attleborough.	1	–	–	–
	Winchendon,	–	1	–	–
Total,		1	1	–	–

REPORT ON INSPECTION OF FOOD AND DRUGS.

Laboratory Examinations of Food and Drugs.

The following tables present the results of the laboratory examinations during the month of July, 1914, of samples of food and drugs collected by inspectors of the Board: —

The cities and towns in which samples were collected were: Abington, Acushnet, Adams, Agawam, Andover, Ayer, Beverly, Boston, Braintree, Brookline, Burlington, Cambridge, Canton, Chelsea, Cheshire, Dedham, Dunstable, Fall River, Fitchburg, Gloucester, Greenfield, Haverhill, Hull, Ipswich, Lawrence, Littleton, Lowell, Lynn, Malden, Marblehead, Milton, New Bedford, Newburyport, North Adams, Palmer, Peabody, Plymouth, Quincy, Randolph, Revere, Rockport, Salem, Shirley, Somerville, Springfield, Stoughton, Waltham, West Springfield, Winchester, Worcester.

Summary of Analyses.

Articles examined.	Number found to be of Good Quality.	Number adulterated or varying from the Legal Standard.	Total.
Butter,	2	2	4
Cocoa,	21	–	21
Condensed milk,	13	–	13
Confectionery,	4	–	4
Cream,	11	–	11
Drugs,	124	25	149
Eggs,	11	4	15
Fat,	1	–	1
Gluten flour,	1	–	1
Lemon extract,	–	1	1
Honey,	2	–	2
Ice cream,	38	2	40
Lime juice,	2	–	2
Maple syrup,	2	–	2
Meat product: —			
Sausages,	8	1	9
Milk,	371	284	655
Olive oil,	13	–	13
Pastry,	1	–	1
Salad dressing,	2	–	2
Shrimp,	–	2	2
Syrups,	4	–	4
Totals,	631	321	952

PROSECUTIONS FOR VIOLATIONS OF THE LAW RELATING TO FOOD AND DRUGS.

Fifteen convictions were secured during the month of July, 1914, for selling adulterated food and drugs, as follows: —

No.	NAME OF DEFENDANT.	Place.	Character of Article sold.
1	Peter S. Bezigian, . . .	Newburyport,	Hamburg steak (sulphurous acid).[1]
2	Warren P. Sweetser, . .	Westford, .	Milk (total solids, 8.92).[2]
3	Peter Gallagher, . . .	Marblehead, .	Milk (total solids, 10.78).[2]
4	The Warren Toppan Company,	Lynn, . .	Spirit of anise (not U. S. P.).[1]
5	Joseph Zito, ...	Lynn, . .	Spirit of camphor (not U. S. P.).
6	E. F. Lenord Company, .	Springfield, .	Spirit of nitre (not U. S. P.).
7	Charles E. Wilkins, . .	Lynn, . .	Spirit of nitre (not U. S. P.).
8	Harry B. Goodrich, . .	Newburyport,	Spirit of nitre (not U. S. P.).[1]
9	Louis W. Reycroft, . .	Cambridge, .	Spirit of nitre (not U. S. P.).[1]
10	Herman F. Hawthorne, . .	Cambridge, .	Spirit of nitre (not U. S. P.).[1]
11	Guy W. Cole, . . .	Dedham, .	Spirit of nitre (not U. S. P.).
12	C. H. Woods, . . .	Cambridge, .	Spirit of nitre (not U. S. P.).
13	Willard E. Lane, . . .	Cambridge, .	Spirit of nitre (not U. S. P.)[1]
14	William C. B. Merriam, .	Springfield, .	Spirit of peppermint (not U. S. P.).
15	Louis A. Norcott, . . .	North Adams,	Tincture of iodine (not U. S. P.).

[1] Appealed.

[2] Watered.

Fines imposed, $273.50.

LIST OF SAMPLES OF FOOD, DRUGS AND MILK COLLECTED DURING THE MONTH OF JULY, 1914.

Samples of Food in which no Adulteration was detected.

BUTTER.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
8730–R	Oriental Restaurant, Haverhill.	

COCOA.

24707	D. Brown, Springfield,	Empire. Empire Grocery Company, Boston.
7293–S	Henry Cirace & Co., Boston,	Quality. Henry Cirace & Company, Boston.
q 13828	Cloverdale Company, Cambridge,	Cloverdale. Cloverdale Company, Boston.
8296–R	Cloverdale Creamery Company, Lowell,	Cloverdale.
24837	French Delicatessen, Boston,	Talmone.
24879	Grand Union Tea Company, Fall River,	Grand Union. Grand Union Tea Company, New York.
24878	H. C. Hambley, Fall River,	Lipton's. Thomas J. Lipton, Made in England.
24515	Wm. Horrigan, Boston,	Cabin. Wm. Horrigan, Boston.
8324–R	Importers Branch, Ltd., Boston,	Quality Breakfast Cocoa.
8060–R	Importers Tea and Coffee Company, Newburyport,	St. Regis.
8570–R	T. Lopez, Waltham,	Empire. Empire Grocery Company, Boston.
24669	Loraine Coffee Company, New Bedford,	Old Dutch. Loraine Coffee Company, New Bedford.
8594–R	Mills Tea and Butter Company, Waltham,	King Arthur. Mills Tea and Butter Company, Boston.
q 13885	People's Store, Fall River,	Delight.
8538–R	B. B. Richardson Company, Lynn,	Boscobel.
8540–R	B. B. Richardson Company, Lynn,	Puritan.
24709	Wm. Scott & Co., Boston,	Cook's.
7976–R	Tea and Coffee Store, 150 Broadway, Chelsea,	Broadway Breakfast.
8034–R	A. S. Watkins, Somerville,	Old Dutch.
7980–R	Store, 251 Broadway, Chelsea,	Yours truly.

CONFECTIONERY.

8550–R	Barkas Bros., Lynn,	Turkish Paste.
8596–R	Kresge 5 and 10 Cent Store, Waltham,	Kisses.
8552–R	Visnic Bros., Lynn,	Kisses.

EGGS.

7683–S	M. Brown & Co., Boston.	
7681–S	M. Brown & Co., Boston.	
7343–S	M. Brown & Co., Boston.	
7725–S	M. Brown & Co., Boston.	
7675–S	Fox Bakery, Boston.	
7677–S	Fox Bakery, Boston.	
7731–S	New York Egg and Fruit Company, Boston.	
7721–S	Standard Egg Company, Boston.	
7723–S	Standard Egg Company, Boston.	
7751–S	Weston's Bakery, Boston,	White Star Egg and Fruit Company, Boston.
7753–S	Weston's Bakery, Boston,	White Star Egg and Fruit Company, Boston.

Samples of Food in which no Adulteration was detected — Continued.

ICE CREAM.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
8534–R	Barkas Bros., Lynn,	Strawberry. Barkas Bros., Lynn.
8830–R	Barkas, Geo., Lynn,	Strawberry. Barkas, Geo., Lynn.
7555–S	Beverly Ice Cream and Candy Parlor, Beverly,	Strawberry. Beverly Ice Cream and Candy Parlor, Beverly.
7629–S	Boston Ice Cream Company, Boston,	Vanilla.
7335–S	C. Cafarello, Malden,	Vanilla. Fash Ice Cream Company.
8574–R	J. Cafarello, Waltham,	Strawberry. Davis Ice Cream Company.
7553–S	A. Carbone, Salem,	Strawberry. Dirigo Cream Company, Salem.
8572–R	M. Depasquale, Waltham,	Strawberry. Davis Ice Cream Company.
7627–S	Joseph Dragan, Melrose,	Vanilla.
8536–R	C. W. Eldridge, Lynn,	Strawberry.
7557–S	J. A. Flockton, Beverly,	Strawberry. J. A. Flockton, Beverly.
8602–R	C. Galanis & Co., Ipswich,	Strawberry. C. Galanis & Co., Ipswich.
7705–S	Hatch, Winchester,	Coffee.
8836–R	Heliotis & Co., Inc., Lynn,	Strawberry. Heliotis & Co., Inc., Lynn.
8838–R	Heliotis & Co., Inc., Lynn,	Vanilla. Heliotis & Co., Inc., Lynn.
8578–R	Huydners Bros., Waltham,	Strawberry.
8528–R	S. Janakas, Lynn,	Vanilla. Janakas, Lynn.
8568–R	T. Lopez, Waltham,	Strawberry. Bushway.
7341–S	Malden Ice Cream Company, Malden,	Strawberry. Malden Ice Cream Company, Malden.
8832–R	Manos Bros., Lynn,	Strawberry. Manos Bros., Lynn.
8606–R	Measuires Company, Inc., Ipswich,	Strawberry. Measuires Company, Inc., Ipswich.
7631–S	Neapolitan Ice Cream Company, Cambridge,	Vanilla.
7547–S	North Shore Creamery Company, Beverly,	Strawberry. North Shore Creamery Company, Beverly.
7549–S	North Shore Creamery Company, Beverly,	Vanilla. North Shore Creamery Company, Beverly.
7451–S	North Shore Creamery Company, Beverly,	Coffee. North Shore Creamery Company, Beverly.
8530–R	Osiris Bros., Lynn,	Vanilla. Osiris Bros., Lynn.
7333–S	A. E. Quesnel, Malden,	Vanilla. Walter Snow, Somerville.
8734–R	Harry Rayisan, Haverhill,	Vanilla.
8604–R	B. B. Richardson, Ipswich,	Strawberry. North Shore Creamery Company, Beverly.
8600–R	Henry A. Russell, Ipswich,	Vanilla. Henry A. Russell, Ipswich.
8822–R	Hiram Watts, Newburyport,	Strawberry. North Shore Creamery Company, Beverly.
8576–R	F. W. Woolworth, Waltham,	Strawberry.
7703–S	Young, Winchester,	Strawberry.
8532–R	Zor Zor Bros., Lynn,	Boston Ice Cream Company, Lynn.
7337–S	Store, Cross Street, Malden,	Vanilla.
7339–S	Store, Cross Street, Malden,	Vanilla. Libby.

LIME JUICE.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
8608–R	Fruit Store, Central Street, Ipswich,	Manhattan Club. Logan, Johnson Company, Boston, Mass.
24816	Manhattan Market Company, Cambridge,	Honor. Burdett & McKinney, Malden.

MAPLE SYRUP.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
24374	Cobb, Hersey & Co., Boston,	Vermont Maple Syrup. Bottled by Cobb, Hersey & Co., Boston.
24326	L. Z. Carpenter, Attleborough.	

MEAT PRODUCTS.

Pork Sausage.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
7747–S	J. B. Blood Company, Lynn.	

Samples of Food in which no Adulteration was detected — Concluded.

MEAT PRODUCTS — Concluded.

Frankfort Sausages.

Number of Sample.	DEALER.	Wholesaler or Manufacturer.
7749-S	J. B. Blood Company, Lynn.	
7625-S	Legal Market, Everett.	
7623-S	Winterbottom & King, Everett.	
7717-S	Worcester Market, Worcester.	
7433-S	Worcester Market, Worcester.	
7435-S	Worcester Market, Worcester.	
7621-S	Zimmerman & Co., Malden.	

OLIVE OIL.

7429-S	Salvatore Busalacchi, Boston.	
25023	Fruit Store, Gloucester,	Aggeles & Vougas, Boston.
7427-S	Italian Grocery, Worcester,	La Stello D'Italia.
q 14121	Lazzara & Lombard, Lawrence,	Girolanno Lucchese, Lawrence.
q 14122	Lazzara & Lombard, Lawrence,	Girolanno Lucchese, Lawrence.
q 14123	Lazzara & Lombard, Lawrence,	Girolanno Lucchese, Lawrence.
q 14124	Lazzara & Lombard, Lawrence,	Girolanno Lucchese, Lawrence.
q 14125	Lazzara & Lombard, Lawrence,	Girolanno Lucchese, Lawrence.
7425-S	Siropoulous & Co., Boston,	Spiro.

SALAD DRESSING.

24855	Alameda Company, Boston.	

SYRUPS.

7439-S	B. F. Berter, Worcester,	Erdbeersyrup. L. Lichtivitz & Co., Tropau, Austria.
8580-R	Quinn's Market, Waltham,	Domino.

Samples of Food which upon Examination were found to be labeled in Accordance with Law.

RENOVATED BUTTER.

Number of Sample.	DEALER.	Wholesaler or Manufacturer.
8736-R	Store, 33 Lock Street, Haverhill.	

GRAPE FRUIT JUICE SYRUPS (CONTAINING SODIUM BENZOATE).

25025	Drug Store, Beacon Street, Brookline,	Cuban. International Fruit Products Company, Boston.
8858-R	Warren F. Wetherall Company, Boston,	Cuban. International Fruit Products Company, Boston.

Samples of Food which upon Examination were found to be adulterated.

EGGS (DECOMPOSED).

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
7735-S	Barney Bunschaft, Boston, ...	Barney Bunschaft, Boston.
7729-S	New York Egg and Fruit Company, Inc., Boston.	
7719-S	Max Schwerer, Boston.	

ICE CREAM (BELOW STANDARD FOR FAT).

8820-R	Chas. H. Richardson, Newburyport, . . .	Strawberry. Chas. B. Richardson, Newburyport.
8834-R	Peter Sakelercadis & Co., Lynn, ...	Vanilla. Boston Ice Cream Company.

MEAT PRODUCTS (CONTAINING MORE THAN 2 PER CENT. STARCH).

Frankforts.

7619-S	J. M. Toher, Malden.	

SHRIMP.

7707-S	New York and Boston Fish Company, Boston.[1]	
7431-S	Worcester Market, Worcester.[2]	

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[1] Decomposed.

[2] Preserved with a compound of boron.

Samples of Drugs in which no Adulteration was detected.

ALCOHOL.

Number of Sample.	DEALER.	Wholesaler or Manufacturer.
q 14080	Doherty & Co., Boston.	
8558-R	J. N. Pike, Lynn.	

ALMOND OIL.

7441-S	Hall & Lyon, Worcester.	
24857	Jaynes Drug Company, Boston.	
7447-S	Wm. E. Temple, Worcester.	

BAY RUM.

8520-R	F. W. Woolworth, Roxbury, ...	C. H. Selick, New York.

BLUE OINTMENT.

8586-R	M. B. Church, Waltham.	
8398-R	Drug Store, Worthington Street, Springfield.	
8172-R	W. B. Hunt Company, Cambridge.	
8174-R	Jaynes Drug Company, Cambridge.	
8448-R	Jaynes Drug Company, Boston.	
8754-R	Jaynes Drug Company, Haverhill.	
8318-R	Liggetts Drug Store, Boston.	
8382-R	Persons Pharmacy, Ware.	

Samples of Drugs in which no Adulteration was detected — Continued.

OLIVE OIL.

Number of Sample.	DEALER.	Wholesaler or Manufacturer.
24656	The Browne Pharmacy, New Bedford.	

SPIRIT OF ANISE.

8560-R	Burke's Pharmacy, Lynn.	
8614-R	B. J. Conley, Ipswich.	
8678-R	Gardner, The Druggist, Boston.	

SPIRIT OF CAMPHOR.

25004	F. A. Barker, Gloucester.	
24948	Burns Pharmacy, Brookline.	
8584-R	E. C. Butnam, Waltham.	
25064	S. F. Cnamberlain, Boston.	
25000	E. E. Comeau, Gloucester.	
25002	Eyees Pharmacy, Gloucester.	
24960	Harvard Square Pharmacy, Brookline.	
8544-R	R. Himmel, Lynn.	
8496-R	Jaynes Drug Company, Haverhill.	
24956	Lyceum Hall Pharmacy, Brookline.	
25007	W. H. Newton, Gloucester.	
24999	Olympia Pharmacy, Gloucester.	
24951	Young & Brown, Brookline.	

SPIRIT OF NITROUS ETHER.

8612-R	Barley's Drug Store, Ipswich.	
8792-R	I. R. Barker, Springfield.	
8620-R	Bay State Drug Company, Palmer.	
7585-S	Brockelman Bros., Shirley.	
8616-R	E. F. Brown, Ipswich.	
8672-R	Burkes Pharmacy, Lynn.	
8744-R	Crafts, A. M., Haverhill.	
8670-R	Curtis & Ellis, Lynn.	
8674-R	Goldthwaite's Drug Store, Lynn.	
8790-R	Green, The Druggist, Springfield.	
7737-S	Green, The Druggist, Boston.	
8862-R	Fred Howard, Lowell.	
8986-R	George Crowell Ketchum, Hyde Park.	
8630-R	A. E. Lerche, Springfield.	
8682-R	Moody, The Druggist, Lowell.	
8622-R	Palmer Drug Company, Palmer.	
8610-R	W. N. Prescott, Ipswich.	
8592-R	E. R. Reed, Waltham.	
8706-R	Russell Pharmacy, Cambridge.	
8796-R	C. V. Ryan, Springfield.	
8738-R	S. J. Sinotte, Haverhill.	

SPIRIT OF PEPPERMINT.

24954	Geo. H. Alexander, Brookline.	
25005	F. A. Barker, Gloucester.	
24949	Burns Pharmacy, Brookline.	
8582-R	Geo. O. Carter & Co., Waltham.	
25065	S. F. Chamberlain, South Boston.	
25001	E. E. Comeau, Gloucester.	
25003	Eyees Pharmacy, Gloucester.	
25072	C. P. Flynn, South Boston.	
25068	J. J. Halloran, South Boston.	
24959	Harvard Square Pharmacy, Brookline.	
24945	Jaynes Drug Company, South Boston.	
8590-R	N. I. Johnson, Waltham.	

Samples of Drugs in which no Adulteration was detected — Concluded.

SPIRIT OF PEPPERMINT — Concluded.

Number of Sample.	DEALER.	Wholesaler or Manufacturer.
24955	Lyceum Hall Pharmacy, Brookline.	
8840-R	J. M. Nelson, Lynn.	
25006	W. H. Newton, Gloucester.	
24998	Olympia Pharmacy, Gloucester.	
8852-R	J. B. Small, Lynn.	
25069	J. J. Tobin, South Boston.	
24950	Young & Brown, Brookline.	

SPIRIT OF WINTERGREEN.

8556-R	Davis & Young, Lynn.	
q 14036	Morse-Winslow Drug Company, Boston.	

TINCTURE OF GINGER.

7113-S	Conant & Co., Shirley,	E. Hartshorn & Sons, Boston.
7589-S	Conant & Co., Shirley,	E. Hartshorn & Sons, Boston.
24594	Hollis Street Pharmacy, Boston.	
7103-S	Josiah P. Thatcher, Littleton,	E. Hartshorn & Sons, Boston.

TINCTURE OF IODINE.

24953	Geo. H. Alexander, Brookline.	
8842-R	A. M. Bailey, Lynn.	
7563-S	J. L. Berry, Beverly.	
8624-R	H. & J. Brewer, Springfield.	
25066	S. F. Chamberlain, South Boston.	
7565-S	P. S. Eaton, Beverly.	
25071	C. P. Flynn, South Boston.	
8478-R	Gammon & Broderick, Haverhill.	
25067	J. J. Halloran, South Boston.	
24858	Harvard Square Pharmacy, Brookline.	
8894-R	Geo. H. Holden, Haverhill.	
24944	Jaynes Company, South Boston.	
24957	Lyceum Hall Pharmacy, Brookline.	
8708-R	J. D. Lynch, Cambridge.	
25008	W. H. Newton, Gloucester.	
8422-R	E. H. Patten, Cambridge.	
8628-R	J. D. Smith, Springfield.	
25070	J. J. Tobin, South Boston.	
8484-R	N. C. Tozier, Haverhill.	
24952	Young & Brown, Brookline.	

WITCH HAZEL.

24854	Alameda Company, Boston.	

ZINC OINTMENT.

7591-S	G. S. Cheney Company, Boston.	
8846-R	Davis & Young, Lynn.	
8746-R	Gammon & Broderick, Haverhill.	
8752-R	Hall & Lyon Company, Haverhill.	
8848-R	Jaynes Drug Company, Lynn.	
8800-R	A. E. Lerche, Springfield.	
8802-R	J. D. Smith, Springfield.	

Samples of Drugs which upon Examination were found to be labeled in Accordance with Law.

PROPRIETARY DRUGS.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
8794-R	Barker's Snowflake Cream, ...	F. A. Barker, Gloucester.

Samples of Drugs which upon Examination were found to be adulterated.

BLUE OINTMENT.

Number of Sample.	DEALER.	Wholesaler or Manufacturer.		Per Cent. of required Strength.
7093-S	Baileys Pharmacy, Ipswich, ...	–	–	80

SPIRIT OF NITROUS ETHER.

7561-S	Chas. A. Baker, Beverly, ...	–	–	78
8798-R	Neil Blance, Springfield, ...	–	–	51
8758-R	A. W. Cunningham, Springfield, ...	–	–	49
8626-R	A. W. Cunningham, Springfield, ...	–	–	54
8562-R	Curtis & Ellis, Lynn, ...	–	–	48
7451-S	Green, The Druggist, Worcester, ...	–	–	59
7713-S	Green, The Druggist, Worcester, ...	–	–	75
8506-R	Hermann F. Hawthorne, Cambridge, . . .	–	–	62
8514-R	Adolphus Holton, Dedham, ...	–	–	66
8680-R	Fred Howard, Lowell, ...	–	–	73
8510-R	Wm. C. Reycroft, Cambridge, ...	–	–	60
8554-R	C. E. Wilkins, Lynn, ...	–	–	74
8668-R	C. E. Wilkins, Lynn, ...	–	–	69

SPIRIT OF PEPPERMINT.

8618-R	Lynde & Gould, Palmer, ...	–	–	60

TINCTURE OF IODINE.

8748-R	Geo. E. Crane, Haverhill, ...	–	–	68
8896-R	Geo. E. Crane, Haverhill, ...	–	–	67
8704-R	W. E. Dyson, Cambridge, ...	–	–	69
8916-R	W. E. Dyson, Cambridge, ...	–	–	70
8856-R	H. E. Hebbard & Co., Lynn, ...	–	–	84
8740-R	G. B. Holden, Haverhill, ...	–	–	71
8494-R	S. J. Sinotte, Haverhill, ...	–	–	83

PROPRIETARY DRUGS.

7715-S[1]	Headache Wafers, ...	Wm. E. Turple, Worcester.

[1] Acetanilid, labeled upon side of box but not upon main label.

Samples of Milk which upon Examination were found to be adulterated.

Number of Sample.	Name of Dealer, Wholesaler or Producer.	Results of Analyses.
24993	Henry N. Batchelder, Peabody, . .	Total solids, 9.18 per cent.; fat, 2.30 per cent.; contained added water.
24994	Henry N. Batchelder, Peabody, . .	Total solids, 9.18 per cent.; fat, 2.60 per cent.; contained added water.
24970	F. J. Baxter, Brookline, ...	Total solids, 9.92 per cent.; fat, 1.15 per cent.; skimmed milk.
24931	C. Bolzarini, Rockport, ...	Total solids, 9.80 per cent.; fat, 3 per cent.; contained added water.
24932	C. Bolzarini, Rockport, ...	Total solids, 8.90 per cent.; fat, 2.40 per cent.; contained added water.
q 14056	Benj. F. Carpenter, Gloucester, . .	Total solids, 9.30 per cent.; fat, 2.60 per cent.; contained added water.
25009	Ivory E. Day, Rockport, . . .	Total solids, 10 per cent.; fat, 2.90 per cent.; contained added water.
25010	Ivory E. Day, Rockport, . . .	Total solids, 11.20 per cent.; fat, 3.50 per cent.; contained added water.
7607-S	Peter Gallagher, Marblehead, . .	Total solids, 10.78 per cent.; fat, 3.30 per cent.; contained added water.
7609-S	Peter Gallagher, Marblehead, . .	Total solids, 11.10 per cent,; fat, 3.45 per cent.; contained added water.
7483-S	Peter Gallagher, Marblehead, . .	Total solids, 11.60 per cent.; fat, 4.20 per cent.; contained added water.
7485-S	Peter Gallagher, Marblehead, . .	Total solids, 11.46 per cent.; fat, 4 per cent.; contained added water.
q 14084	Graustein Company, Chelsea, . .	Total solids, 10.58 per cent.; fat, 1.95 per cent.; proteins, 2.97 per cent.; skimmed milk.
25042	Thos. Hebert, New Bedford, . . .	Total solids, 11.10 per cent.; fat, 3.80 per cent.; contained added water.
25103	Thos. Hebert, New Bedford, . . .	Total solids, 11.52 per cent.; fat, 3.50 per cent.; contained added water.
25106	Thos. Hebert, New Bedford, . . .	Total solids, 10.76 per cent.; fat, 2.40 per cent.; proteins, 2.85 per cent.; skimmed milk.
7583-S	G. Frank A. Lawrence, Shirley, . .	Total solids, 12.20 per cent.; fat, 2.90 per cent.; proteins, 3.37 per cent.; skimmed milk.
25084	Max Marder, New Bedford, . . .	Total solids, 11.44 per cent.; fat, 2.70 per cent.; proteins, 3.05 per cent.; skimmed milk.
25077	J. Palme, New Bedford, ...	Total solids, 10.76 per cent.; fat, 2.20 per cent.; proteins, 2.84 per cent.; skimmed milk.
25086	Phoenix, New Bedford, ...	Total solids, 9.66 per cent.; fat, 1 per cent.; skimmed milk.
8772-R	Randall Bros., West Springfield, . .	Total solids, 10.52 per cent.; fat, 1.75 per cent.; skimmed milk.
8776-R	Randall Bros., West Springfield, . .	Total solids, 11.20 per cent.; fat, 2.30 per cent.; skimmed milk.
8598-R	Henry A. Russell, Ipswich, . . .	Total solids, 11.90 per cent.; fat, 2.45 per cent.; skimmed milk.
8804-R	John C. Ruth, Newburyport, . .	Total solids, 10.98 per cent.; fat, 1.70 per cent.; proteins, 2.94 per cent.; skimmed milk.
7671-S	Joseph Sampson, Braintree, . . .	Total solids, 12.80 per cent.; fat, 4.50 per cent.; contained added water.
24920	Thomas Joseph, Gloucester, . . .	Total solids, 9.40 per cent.; fat, 2.20 per cent.; contained added water.
25079	J. J. Taylor, New Bedford, . . .	Total solids, 9.68 per cent.; fat, 2 per cent.; proteins, 2.37 per cent.; skimmed milk.
25082	H. A. Voghal, New Bedford, . . .	Total solids, 11.62 per cent.; fat, 2.80 per cent.; proteins, 3.08 per cent.; skimmed milk.
25148	Wm. P. Walcott, Canton, . . .	Total solids, 11.62 per cent.; fat, 3.70 per cent.; contained added water.
25149	Wm. P. Walcott, Canton, . . .	Total solids, 11.48 per cent.; fat, 3.55 per cent.; contained added water.
25150	Wm. P. Walcott, Canton, . . .	Total solids, 11.82 per cent.; fat, 3.80 per cent.; contained added water.
25151	Wm. P. Walcott, Canton, . . .	Total solids, 11.66 per cent.; fat, 3.90 per cent.; contained added water.
25152	Wm. P. Walcott, Canton, . . .	Total solids, 11.80 per cent.; fat, 3.90 per cent.; contained added water.
25153	Wm. P. Walcott, Canton, . . .	Total solids, 11.68 per cent.; fat, 3.80 per cent.; contained added water.
25154	Wm. P. Walcott, Canton, . . .	Total solids, 11.82 per cent.; fat, 3.90 per cent.; contained added water.
25155	Wm. P. Walcott, Canton, . . .	Total solids, 11.68 per cent.; fat, 3.70 per cent.; contained added water.

Samples of Milk which upon Examination were found to be adulterated — Concluded.

Number of Sample.	Name of Dealer, Wholesaler or Producer.	Results of Analyses.
25156	Wm. P. Walcott, Canton, . . .	Total solids, 11.42 per cent.; fat, 3.50 per cent.; contained added water.
25157	Wm. P. Walcott, Canton, . . .	Total solids, 11.14 per cent.; fat, 3.10 per cent.; contained added water.
25158	Wm. P. Walcott, Canton, . . .	Total solids, 11.16 per cent.; fat, 3.40 per cent.; contained added water.
25159	Wm. P. Walcott, Canton, . . .	Total solids, 11.10 per cent.; fat, 3.20 per cent.; contained added water.
25160	Wm. P. Walcott, Canton, . . .	Total solids, 11 per cent.; fat, 3.10 per cent.; contained added water.
25161	Wm. P. Walcott, Canton, . . .	Total solids, 11.06 per cent.; fat, 3.10 per cent.; contained added water.
25162	Wm. P. Walcott, Canton, . . .	Total solids, 11.14 per cent.; fat, 3.30 per cent.; contained added water.
25163	Wm. P. Walcott, Canton, . . .	Total solids, 11.12 per cent.; fat, 3.30 per cent.; contained added water.
25164	Wm. P. Walcott, Canton, . . .	Total solids, 10.94 per cent.; fat, 3.10 per cent.; contained added water.
25165	Wm. P. Walcott, Canton, . . .	Total solids, 10.72 per cent.; fat, 2.90 per cent.; contained added water.
8924-R	Wheeler Bros., Marblehead, . . .	Total solids, 10.12 per cent.; fat, 3.20 per cent.; contained added water.
8926-R	Wheeler Bros., Marblehead, . . .	Total solids, 10.70 per cent.; fat, 3.20 per cent.; contained added water.
8928-R	Wheeler Bros., Marblehead, . . .	Total solids, 9.91 per cent.; fat, 3,20 per cent.; contained added water.
8930-R	Wheeler Bros., Marblehead, . . .	Total solids, 10.37 per cent.; fat, 3.20 per cent.; contained added water.
8934-R	Wheeler Bros., Marblehead, . . .	Total solids, 11.14 per cent.; fat, 3.60 per cent.; contained added water.
8936-R	Wheeler Bros., Marblehead, . . .	Total solids, 11.20 per cent.; fat, 3.50 per cent.; contained added water.
8938-R	Wheeler Bros., Marblehead, . . .	Total solids, 11.10 per cent.; fat, 3.60 per cent.; contained added water.
8940-R	Wheeler Bros., Marblehead, . . .	Total solids, 11.12 per cent.; fat, 3.50 per cent.; contained added water.
8942-R	Wheeler Bros., Marblehead, . . .	Total solids, 11.10 per cent.; fat, 3.60 per cent.; contained added water.
8646-R	Zandan Bros., Springfield, . . .	Total solids, 11.48 per cent.; fat, 2.70 per cent.; skimmed milk.

QUARTERLY REPORT ON COLD STORAGE.

During the months of April, May and June, 1914, cold-storage warehouses throughout the State were visited by the State inspectors. As a result of their inspections a number of articles were condemned, confiscated and destroyed on account of being decomposed, tainted or otherwise unfit for food, as shown below.

The following tables show the quantities of articles of food placed in cold storage during the three months preceding the first day of July, 1914; also, the quantities of butter and eggs held on the first day of July, 1914: —

ARTICLES PLACED IN COLD STORAGE.

ARTICLE.	Cases.	Dozens.	Packages.	Pounds.
Eggs, case, ...	561,212	16,836,336	–	–
Eggs, broken, . . .	–	–	262	526,131
Butter, ...	–	–	199,494	11,986,960
Poultry, ...	126	–	3,765	2,011,338
Game, ...	–	91	322	1,625
Meat, fresh, ...	–	–	7,290	6,626,495
Meat products, fresh (except in process of manufacture).	–	–	5,817	979,157
Fish, fresh food, . . .	404	–	49	7,149,601
Total, ...	561,742	16,836,427	216,999	29,281,307

BUTTER AND EGGS HELD.

ARTICLE.	Cases.	Dozens.	Packages.	Pounds.
Eggs, case, ...	544,841	16,190,766	–	–
Eggs, broken, . . .	–	–	165	7,163
Butter, ...	–	–	194,998	10,976,765
Total, ...	544,841	16,190,766	195,163	10,983,928

ARTICLES IN COLD STORAGE CONDEMNED UPON PHYSICAL EXAMINATION ALONE AS UNFIT FOR FOOD.

Date.	ARTICLES.	Weight (Pounds).	Reasons.	Disposition.
July 3, 1914	Mackerel, . .	609	Soiled and tainted	Buried at sea
July 6, 1914	Mackerel, . .	310	Decomposed	Rendered
July 7, 1914	Bass, . . .	106	Decomposed	Buried at sea
July 21, 1914	Shad, . . .	118	Decomposed	Buried at sea
July 21, 1914	Mackerel, . .	127	Decomposed	Buried at sea
July 28, 1914	Mackerel, . .	970	Tainted and old	Buried at sea
Total, .	. . . .	2,240		

QUARTERLY REPORT ON THE BUSINESS OF SLAUGHTERING AND MEAT INSPECTION.

The quarterly report on the work of slaughtering and meat inspection from April 1, 1914, to June 30, 1914, inclusive, has been rendered to the State Board of Health by the inspectors of slaughtering in the various cities and towns throughout the Commonwealth. The result of these inspections may be found in the following tables showing the number and kinds of carcasses inspected, the condemnations of carcasses found unfit for food, the reasons for condemnation and the disposition of such carcasses.

Where a blank space appears it indicates the absence of a report having been rendered by the inspector of slaughtering for such city or town, or that an inspector of slaughtering has not been nominated by the local board of health, or has not been approved by the State Board of Health.

Quarterly Report on Slaughtering Inspection, April 1–June 30, 1914.

Cities and Towns.	Number of Cattle.	Number of Calves.	Number of Hogs.	Number of Sheep.	Number of Condemnations.	Reasons for Condemnation.	Disposition of Carcasses.
Abington,	1	72	7	–	3 calves	3 immature	3 fed to hogs
Acton,	362	426	38	6	17 cattle, 17 calves, 2 hogs	12 tuberculosis, 4 milk fever, 1 septicæmia, 17 immature, 2 hog cholera	17 rendered, 17 fed to hogs, 2 buried
Acushnet,	3	66	34	–	–	–	–
Adams,	12	294	3	–	–	–	–
Agawam,	356	518	23	–	2 cattle, 2 calves	1 tuberculosis, 1 injured, 2 immature	2 rendered, 1 fed to hogs, 1 fed to hens
Alford,	1	–	–	–	–	–	–
Amesbury,	5	43	22	–	–	–	–
Amherst,	44	143	23	–	–	–	–

Andover, . . .	–	8	63	–	–	–	–	–	–	–
Arlington, . . .	–	861	–	–	13 calves		13 immature		13 rendered	
Ashburnham, . .	2	23	21	2	–	–	–	–	–	–
Ashby, ...	56	275	78	–	3 cattle, 2 hogs		5 tuberculosis		5 rendered	
Ashfield, . . .	26	5	59	3	1 cow		1 tuberculosis		1 rendered	
Ashland, . . .	–	–	–	–	–	–	–	–	–	–
Athol, ...	4	33	56	1	–	–	–	–	–	–
Attleborough, . .	62	109	54	9	1 cow		1 tuberculosis		1 buried	
Auburn, . . .	14	43	19	–	1 cow		1 tuberculosis		1 rendered	
Avon, ...	–	–	–	–	–	–	–	–	–	–
Ayer, ...	–	–	–	–	–	–	–	–	–	–
Barnstable, . . .	–	63	7	–	–	–	–	–	–	–
Barre, ...	2	6	10	1	–	–	–	–	–	–
Becket, ...	2	11	3	–	–	–	–	–	–	–
Bedford, . . .	–	–	–	–	–	–	–	–	–	–
Belchertown, . . .	14	98	38	–	–	–	–	–	–	–
Bellingham, . . .	–	–	9	–	–	–	–	–	–	–
Belmont, . . .	–	–	–	–	–	–	–	–	–	–
Berkley, . . .	–	–	–	–	–	–	–	–	–	–
Berlin, ...	–	4	6	–	–	–	–	–	–	–
Bernardston, . . .	–	4	15	–	–	–	–	–	–	–
BEVERLY, . . .	–	–	2	–	–	–	–	–	–	–
Billerica, . . .	11	15	17	–	1 calf		1 immature		1 rendered	
Blackstone, . . .	–	–	–	–	–	–	–	–	–	–
Blandford, . . .	–	39	6	–	–	–	–	–	–	–
Bolton, ...	–	–	–	–	–	–	–	–	–	–
Bourne, ...	–	4	4	–	–	–	–	–	–	–
Boxborough, . . .	–	–	–	–	–	–	–	–	–	–
Boxford, . . .	20	32	23	7	–	–	–	–	–	–
Boylston, . . .	5	50	31	–	1 calf		1 tuberculosis		1 rendered	
Braintree, . . .	5	121	21	–	–	–	–	–	–	–
Brewster, . . .	–	16	6	–	–	–	–	–	–	–
Bridgewater, . . .	2	2	11	–	–	–	–	–	–	–
Brimfield, . . .	–	9	24	–	1 hog		1 bruised	–	1 consumed by owner	
BROCKTON, . . .	2	–	23	–	1 cow, 1 hog		2 tuberculosis		2 rendered	
Brookfield, . . .	–	6	8	–	–	–	–	–	–	–
Brookline, . . .	–	–	–	–	–	–	–	–	–	–
Buckland, . . .	–	–	9	–	–	–	–	–	–	–
Burlington, . . .	–	–	–	–	–	–	–	–	–	–

QUARTERLY REPORT ON SLAUGHTERING INSPECTION, APRIL 1–JUNE 30, 1914 — *Continued.*

CITIES AND TOWNS.	Number of Cattle.	Number of Calves.	Number of Hogs.	Number of Sheep.	Number of Condemnations.	Reasons for Condemnation.	Disposition of Carcasses.
CAMBRIDGE,	–	3,711	–	–	111 calves	87 immature, 14 bruised, 3 phlebitis, 7 weak condition	111 rendered
Canton,	–	–	–	–	– –	– –	– –
Carlisle,	6	26	1	–	– –	– –	– –
Carver,	–	10	–	–	– –	– –	– –
Charlemont,	4	4	19	2	– –	– –	– –
Charlton,	44	155	41	–	– –	– –	– –
Chatham,	–	–	–	–	– –	– –	–
Chelmsford,	79	160	124	1	4 cattle, 7 calves, 2 hogs, 1 sheep	2 tuberculosis, 4 dead on arrival, 1 improperly prepared, 7 immature	12 rendered, 2 fed to hogs
CHELSEA,	–	–	–	–	– –	– –	– –
Cheshire,	5	37	30	–	– –	– –	– –
Chester,	2	21	7	1	– –	– –	– –
Chesterfield,	2	19	30	1	– –	– –	– –
CHICOPEE,	3	3	16	–	– –	– –	– –
Chilmark,	–	–	–	–	– –	– –	– –
Clarksburg,	7	14	19	–	– –	– –	– –
Clinton,	7	96	130	1	2 calves	2 immature	2 rendered
Cohasset,	–	6	3	–	– –	– –	– –
Colrain,	–	–	–	–	– –	– –	– –
Concord,	–	–	–	–	– –	– –	– –
Conway,	–	–	–	–	– –	– –	– –
Cummington,	2	21	36	2	– –	– –	– –
Dalton,	7	11	9	–	– –	– –	– –
Dana,	–	7	4	–	– –	– –	– –
Danvers,	1	71	–	–	– –	– –	– –
Dartmouth,	14	125	40	–	– –	– –	– –
Dedham,	–	175	57	–	– –	– –	– –
Deerfield,	2	17	90	–	– –	– –	– –
Dennis,	–	14	2	–	– –	– –	– –
Dighton,	87	110	15	–	1 cow	1 tuberculosis	1 buried

Douglas,	1	22	23	–	1 hog	1 tuberculosis	1 buried
Dover,	–	–	4	–	– –	– –	– –
Dracut,	345	142	42	–	10 cattle, 9 calves, 1 hog	11 tuberculosis, 9 immature	19 rendered, 1 buried
Dudley,	26	84	44	–	– –	– –	– –
Dunstable,	–	–	–	–	– –	– –	– –
Duxbury,	–	12	9	3	– –	– –	– –
East Bridgewater,	–	174	1	1	– –	– –	– –
East Longmeadow,	2	–	18	–	– –	– –	– –
Eastham,	–	7	2	–	– –	– –	– –
Easthampton,	3	151	37	–	– –	– –	– –
Easton,	–	10	–	2	– –	– –	– –
Edgartown,	–	37	9	14	– –	– –	– –
Egremont,	13	26	1	9	– –	– –	– –
Enfield,	–	201	31	–	– –	– –	– –
Erving,	–	10	15	–	– –	– –	– –
Essex,	–	3	1	–	– –	– –	– –
EVERETT,	–	–	–	–	– –	– –	– –
Fairhaven,	201	267	–	4	8 cattle, 18 calves	5 tuberculosis, 3 septicæmia, 18 immature	26 rendered
FALL RIVER,	2	1	1	–	– –	– –	– –
Falmouth,	–	–	–	–	– –	– –	– –
FITCHBURG,	216	569	71	13	7 calves	4 immature, 3 dead on arrival	7 rendered
Florida,	1	3	2	–	– –	– –	– –
Foxborough,	1	5	4	–	– –	– –	–
Framingham,	34	104	9	–	1 cow, 2 calves	1 tuberculosis, 2 immature	3 rendered
Franklin,	–	18	87	–	1 hog	1 septicæmia	1 rendered
Freetown,	2	2	7	–	– –	– –	– –
Gardner,	–	–	–	–	– –	– –	– –
Gay Head,	–	–	–	–	– –	– –	– –
Georgetown,	–	12	–	–	– –	– –	– –
Gill,	2	35	8	5	– –	– –	– –
GLOUCESTER,	1	62	2	–	12 calves	12 immature	12 rendered
Goshen,	7	4	6	–	– –	– –	– –
Gosnold,	3	–	–	19	– –	– –	– –
Grafton,	3	55	80	–	– –	– –	– –
Granby,	157	287	28	–	1 cow	1 tuberculosis	1 buried

QUARTERLY REPORT ON SLAUGHTERING INSPECTION, APRIL 1–JUNE 30, 1914 — *Continued.*

CITIES AND TOWNS.	Number of Cattle.	Number of Calves.	Number of Hogs.	Number of Sheep.	Number of Condemnations.	Reasons for Condemnation.	Disposition of Carcasses.
Granville,	–	–	–	–	– –	– –	– –
Great Barrington,	2	55	4	4	1 cow	1 tuberculosis	1 rendered
Greenfield,	24	120	102	192	– –	– –	– –
Greenwich,	2	25	29	–	– –	– –	– –
Groton,	–	–	–	–	– –	– –	– –
Groveland,	–	3	–	–	– –	– –	– –
Hadley,	–	–	19	–	– –	– –	– –
Halifax,	–	–	2	–	– –	– –	– –
Hamilton,	–	–	–	–	– –	– –	– –
Hampden,	1	52	4	–	– –	– –	– –
Hancock,	–	69	–	15	– –	– –	– –
Hanover,	4	7	1	–	– –	– –	– –
Hanson,	–	1	6	–	– –	– –	– –
Hardwick,	–	6	5	–	– –	– –	– –
Harvard,	5	132	13	2	3 cattle	2 tuberculosis, 1 emaciation	1 rendered, 1 buried, 1 burned
Harwich,	5	17	8	–	– –	– –	– –
Hatfield,	6	94	144	–	1 cow	1 tuberculosis	1 rendered
HAVERHILL,	–	–	–	–	– –	– –	– –
Hawley,	7	1	7	–	– –	– –	– –
Heath,	2	–	23	–	– –	– –	– –
Hingham,	1	1	–	–	– –	– –	– –
Hinsdale,	11	24	8	–	1 calf	1 poisoned	1 buried
Holbrook,	–	–	–	–	– –	– –	– –
Holden,	12	80	14	1	– –	– –	– –
Holland,	–	–	–	–	– –	– –	– –
Holliston,[1]	–	–	–	–	– –	– –	– –
HOLYOKE,	1	3	3	–	1 cow	1 tuberculosis	1 rendered
Hopedale,	–	–	–	–	– –	– –	– –
Hopkinton,	–	8	–	–	– –	– –	– –
Hubbardston,	1	36	18	–	– –	– –	– –
Hudson,	–	6	–	–	– –	– –	– –
Hull,	–	–	–	–	– –	– –	– –
Huntington,	4	30	30	67	– –	– –	– –

Ipswich,	1	11	16	–	–	–	–
Kingston,	–	6	–	–	–	–	–
Lakeville,	–	2	–	–	–	–	–
Lancaster,	–	2	3	–	–	–	–
Lanesborough,	10	35	23	–	–	–	–
LAWRENCE,	55	27	91	–	2 cattle	2 tuberculosis	2 rendered
Lee,	–	–	–	–	–	–	–
Leicester,	1	90	2	–	–	–	–
Lenox,	64	34	45	23	–	–	–
Leominster,	20	111	44	–	3 cattle, 4 calves, 1 hog	4 tuberculosis, 4 immature	8 rendered
Leverett,	–	2	42	–	2 hogs	1 tuberculosis, 1 nephritis	2 buried
Lexington,	2	412	93	5	5 calves	5 bruised	5 rendered
Leyden,	1	10	4	–	–	–	–
Lincoln,	–	–	–	–	–	–	–
Littleton,	–	–	–	–	–	–	–
Longmeadow,	–	–	5	–	–	–	–
LOWELL,	–	–	60	–	1 hog	1 tuberculosis	1 rendered
Ludlow,	2	225	5	–	–	–	–
Lunenburg,	89	180	76	1	1 cow, 1 hog	1 endocarditis, 1 enteritis	2 rendered
LYNN,	74	36	21	–	1 cow, 3 calves	1 tuberculosis, 3 immature	4 rendered
Lynnfield,	41	303	7	–	2 cattle, 4 calves, 2 hogs	2 tuberculosis, 4 immature, 2 hog cholera	8 rendered
MALDEN,	–	–	–	–	–	–	–
Manchester,	–	–	–	–	–	–	–
Mansfield,	9	10	49	–	–	–	–
Marblehead,	–	–	6	–	–	–	–
Marion,	1	2	17	–	–	–	–
MARLBOROUGH,	2	60	31	–	1 cow, 1 calf	1 tuberculosis, 1 immature	2 rendered
Marshfield.	–	5	2	–	–	–	–
Mashpee,	–	–	–	–	–	–	–
Mattapoisett,	–	6	7	–	–	–	–
Maynard,	20	100	76	1	1 cow	1 tuberculosis	1 rendered
Medfield,	–	1	–	–	–	–	–

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[1] Report received too late to classify.

QUARTERLY REPORT ON SLAUGHTERING INSPECTION, APRIL 1–JUNE 30, 1914 — *Continued.*

CITIES AND TOWNS.	Number of Cattle.	Number of Calves.	Number of Hogs.	Number of Sheep.	Number of Condemnations.	Reasons for Condemnation.	Disposition of Carcasses.
MEDFORD,	–	–	–	–	–	–	–
Medway,	55	359	12	5	2 cattle, 1 hog	2 tuberculosis, 1 dead on arrival	3 buried
MELROSE,	–	–	3	–	–	–	–
Mendon,	–	4	–	–	–	–	–
Merrimac,	–	–	–	–	–	–	–
Methuen,	119	77	142	24	7 cattle, 4 calves	5 tuberculosis, 1 hepatic abscess, 2 inspector not present, 3 immature	11 rendered
Middleborough,	28	90	19	–	–	–	–
Middlefield,	–	–	–	–	–	–	–
Middleton,	–	–	10	–	–	–	–
Milford,	66	178	94	3	2 cattle, 8 calves	2 tuberculosis, 8 immature	5 rendered, 5 buried
Millbury,	–	–	–	–	–	–	–
Millis,	15	20	–	–	–	–	–
Milton,	–	1	5	–	–	–	–
Monroe,	–	2	–	–	–	–	–
Monson,	1	51	24	–	–	–	–
Montague,	2	44	37	10	1 cow	1 tuberculosis	1 buried
Monterey,	7	78	7	3	–	–	–
Montgomery,	–	–	–	–	–	–	–
Mount Washington,	–	–	–	–	–	–	–
Nahant,	–	–	–	–	–	–	–
Nantucket,	–	85	13	–	–	–	–
Natick,	–	–	–	–	–	–	–
Needham,	–	–	–	–	–	–	–
New Ashford,	–	–	4	–	–	–	–
NEW BEDFORD,	72	211	65	1	4 cattle	4 tuberculosis	4 rendered
New Braintree,	2	80	3	–	–	–	–
New Marlborough,	–	–	–	–	–	–	–
New Salem,	–	–	–	–	–	–	–
Newbury,	13	199	17	5	2 cattle, 11 calves, 1 hog	1 tuberculosis, 1 emaciation, 11 immature, 1 hog cholera	14 rendered

NEWBURYPORT,	89	209	42	14	2 cattle, 3 calves	2 tuberculosis, 3 immature	5 rendered
NEWTON,	–	–	–	–	–	–	–
Norfolk,	–	–	–	–	–	–	–
NORTH ADAMS,	69	197	57	–	1 cow, 3 calves	1 pneumonia, 3 immature	4 rendered
North Andover,	–	1	8	–	1 hog	1 pneumonia	1 rendered
North Attleborough,	46	127	56	–	1 calf	1 tuberculosis	1 buried
North Brookfield,	–	–	–	–	–	–	–
North Reading,	–	–	–	–	–	–	–
NORTHAMPTON,	45	131	9	–	2 cattle, 2 hogs	2 tuberculosis, 2 hog cholera	4 rendered
Northborough,	–	12	2	1	–	–	–
Northbridge,	–	–	–	–	–	–	–
Northfield,	2	13	53	1	–	–	–
Norton,	–	2	1	–	–	–	–
Norwell,	–	21	6	3	–	–	–
Norwood,	–	–	–	–	–	–	–
Oak Bluffs,	13	–	–	–	–	–	–
Oakham,	–	38	–	–	–	–	–
Orange,	10	44	28	–	1 cow, 1 hog	2 tuberculosis	1 rendered, 1 buried
Orleans,	1	3	8	–	–	–	–
Otis,	1	15	1	–	–	–	–
Oxford,	–	8	13	–	–	–	–
Palmer,	–	–	–	–	–	–	–
Paxton,	9	29	8	–	–	–	–
Peabody,	98	229	171	4	1 cow, 6 calves	1 tuberculosis, 6 immature	7 rendered
Pelham,	–	8	3	–	–	–	–
Pembroke,	1	57	17	–	–	–	–
Pepperell,	3	95	19	–	–	–	–
Peru,	–	–	–	–	–	–	–
Petersham,	1	19	35	2	–	–	–
Phillipston,	–	23	2	–	–	–	–
PITTSFIELD,	179	189	53	15	4 cattle, 1 calf	4 tuberculosis, 1 emaciation	4 rendered, 1 buried
Plainfield,	5	22	53	–	–	–	–
Plainville,	–	1	–	–	–	–	–
Plymouth,	18	38	13	–	1 calf	1 immature	1 rendered

Quarterly Report on Slaughtering Inspection, April 1–June 30, 1914 — *Continued.*

Cities and Towns.	Number of Cattle.	Number of Calves.	Number of Hogs.	Number of Sheep.	Number of Condemnations.	Reasons for Condemnation.	Disposition of Carcasses.
Plympton,	–	–	–	–	– –	– –	– –
Prescott,	–	–	7	–	– –	– –	– –
Princeton,	–	4	13	–	– –	– –	– –
Provincetown,	–	4	3	–	– –	– –	– –
Quincy,	–	–	1	–	1 hog	1 rupture	1 buried
Randolph,	–	–	–	–	– –	– –	– –
Raynham,	–	28	3	5	– –	– –	– –
Reading,	73	53	41	–	1 cow, 1 calf	1 tuberculosis, 1 immature	2 rendered
Rehoboth,	16	214	3	–	– –	– –	– –
Revere,	–	–	–	–	– –	– –	– –
Richmond,	–	–	–	–	– –	– –	– –
Rochester,	2	176	58	–	1 hog	1 tuberculosis	1 rendered
Rockland,	–	–	–	–	– –	– –	– –
Rockport,	–	45	1	–	– –	– –	– –
Rowe,	2	1	13	–	– –	– –	– –
Rowley,	13	80	11	2	– –	– –	– –
Royalston,	–	23	16	–	– –	– –	– –
Russell,	–	8	15	–	– –	– –	– –
Rutland,	–	–	–	–	– –	– –	– –
Salem,	–	–	–	–	– –	– –	– –
Salisbury,	–	–	–	–	– –	– –	– –
Sandisfield,	7	15	7	1	– –	– –	– –
Sandwich,	–	–	6	–	– –	– –	– –
Saugus,	–	–	–	–	– –	– –	– –
Savoy,	–	–	–	–	– –	– –	– –
Scituate,	–	6	2	–	– –	– –	– –
Seekonk,[1]	–	–	–	–	– –	– –	– –
Sharon,	–	2	–	–	– –	– –	– –
Sheffield,	18	21	7	18	1 cow	1 tuberculosis	1 buried
Shelburne,	11	42	60	26	– –	– –	– –
Sherborn,	–	–	–	–	– –	– –	– –

Shirley,	1	–	28	–	–	–	–	–	–	–
Shrewsbury,	14	249	56	10	1 cow		1 tuberculosis		1 rendered	
Shutesbury,	–	2	1	–	–	–	–	–	–	–
Somerset,	7	1	36	–	–	–	–	–	–	–
SOMERVILLE,	–	–	–	–	–	–	–	–	–	–
South Hadley,	8	239	31	–	–	–	–	–	–	–
Southampton,	36	104	25	–	–	–	–	–	–	–
Southborough,	–	–	–	–	–	–	–	–	–	–
Southbridge,	23	19	25	3	–	–	–	–	–	–
Southwick,	2	44	26	–	–	–	–	–	–	–
Spencer,	8	26	13	1	–	–	–	–	–	–
SPRINGFIELD,	7	132	–	1	1 cow		1 tuberculosis		1 buried	
Sterling,	–	–	–	–	–	–	–	–	–	–
Stockbridge,	–	15	–	–	–	–	–	–	–	–
Stoneham,	–	–	–	–	–	–	–	–	–	–
Stoughton,	11	66	3	–	–	–	–	–	–	–
Stow,	–	6	–	–	–	–	–	–	–	–
Sturbridge,	61	293	39	–	–	–	–	–	–	–
Sudbury,	–	8	5	–	2 calves		2 immature		2 burned	
Sunderland,	1	45	15	–	–	–	–	–	–	–
Sutton,	–	31	8	–	–	–	–	–	–	–
Swampscott,	–	–	–	–	–	–	–	–	–	–
Swansea,	55	89	29	16	–	–	–	–	–	–
TAUNTON,	71	36	116	1	3 cattle, 1 hog		3 tuberculosis, 1 pneumonia		4 rendered	
Templeton,	1	38	21	1	–	–	–	–	–	–
Tewksbury,	72	100	47	2	3 calves, 1 hog		3 immature, 1 tuberculosis		3 fed to hens, 1 rendered	
Tisbury,	–	–	–	–	–	–	–	–	–	–
Tolland,	–	–	–	–	–	–	–	–	–	–
Topsfield,	–	30	16	837	2 calves		2 immature		2 rendered	
Townsend,	6	19	21	–	–	–	–	–	–	–
Truro,	–	–	–	–	–	–	–	–	–	–
Tyngsborough,	–	–	9	–	–	–	–	–	–	–
Tyringham,	–	24	7	–	–	–	–	–	–	–
Upton,	1	–	2	–	–	–	–	–	–	–
Uxbridge,	2	6	18	–	1 hog		1 tuberculosis		1 rendered	

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[1] Report received too late to classify.

QUARTERLY REPORT ON SLAUGHTERING INSPECTION, APRIL 1–JUNE 30, 1914 — *Concluded.*

CITIES AND TOWNS.	Number of Cattle.	Number of Calves.	Number of Hogs.	Number of Sheep.	Number of Condemnations.	Reasons for Condemnation.	Disposition of Carcasses.
Wakefield,	–	–	6	–	1 hog	1 tuberculosis	1 rendered
Wales,	–	–	–	–	–	–	–
Walpole,	–	4	19	–	–	–	–
WALTHAM,	–	–	2	–	–	–	–
Ware,	–	–	–	–	–	–	–
Wareham,	2	17	47	–	–	–	–
Warren,	5	23	27	–	–	–	–
Warwick,	–	4	4	–	–	–	–
Washington,	5	31	23	–	–	–	–
Watertown,	2	537	51	–	8 calves	4 immature, 4 dead on arrival	8 rendered
Wayland,	–	4	15	–	–	–	–
Webster,	1	3	32	–	1 cow	1 tuberculosis	1 buried
Wellesley,	–	–	–	–	–	–	–
Wellfleet,	3	9	–	–	–	–	–
Wendell,	–	15	8	–	–	–	–
Wenham,	–	–	–	–	–	–	–
West Boylston,	1	8	1	–	–	–	–
West Bridgewater,	1	149	124	–	1 cow, 9 calves	1 difficult parturition, 8 immature, 1 bruised	10 rendered
West Brookfield,	–	20	4	1	–	–	–
West Newbury,	2	8	11	–	–	–	–
West Springfield,	2	17	18	–	–	–	–
West Stockbridge,	1	24	4	–	–	–	–
West Tisbury,	–	9	–	17	–	–	–
Westborough,	–	20	–	–	–	–	–
Westfield,	3	34	7	–	–	–	–
Westford,	3	122	65	–	–	–	–
Westhampton,	4	39	25	2	–	–	–
Westminster,	–	1	1	–	–	–	–
Weston,	9	149	37	–	16 calves	16 immature	16 buried
Westport,	141	194	94	12	1 cow, 1 calf, 1 hog	2 tuberculosis, 1 immature	3 rendered
Westwood,	–	–	–	–	–	–	–
Weymouth,	3	148	11	–	1 hog	1 tuberculosis	1 buried
Whately,	3	–	17	3	–	–	–

Whitman,	1	9	–	–	– –	– –	– –
Wilbraham,	4	18	9	–	– –	– –	– –
Williamsburg,	–	–	–	–	– –	– –	– –
Williamstown,	12	300	152	27	1 cow, 1 hog	1 tuberculosis, 1 hog cholera	1 buried, 1 rendered
Wilmington,	2	96	54	–	3 calves	3 immature	3 rendered
Winchendon,	6	47	34	1	1 cow	1 advanced pregnancy	1 buried
Winchester,	–	–	–	–	– –	– –	– –
Windsor,	3	40	2	–	– –	– –	– –
Winthrop,	–	–	–	–	– –	– –	– –
WOBURN,	4	44	660	–	– –	– –	– –
WORCESTER,	659	526	347	4	12 cattle, 15 calves, 2 hogs	11 tuberculosis, 1 traumatic pericarditis, 15 immature, 2 pneumonia	29 rendered
Worthington,	2	21	18	–	– –	– –	– –
Wrentham,	–	2	–	–	– –	– –	– –
Yarmouth,	–	–	–	–	– –	– –	– –

SUMMARY.

Total number of carcasses inspected,			34,727
(*a*) Cattle,	5,166		
(*b*) Calves,	21,001		
(*c*) Hogs,	7,060		
(*d*) Sheep,	1,500		
Total number of carcasses passed,			34,249
Total number of carcasses condemned,			478
(*a*) Cattle,	121		
(*b*) Calves,	321		
(*c*) Hogs,	35		
(*d*) Sheep,	1		
Reasons for condemnation: —			
(*a*) Tuberculosis,		118	
Cattle,	99		
Calves,	2		
Hogs,	17		
(*b*) Immature,		279	
Calves,	279		
(*c*) Hog cholera,		8	
Hogs,	8		

Reasons for condemnation — *Continued.*		
(*d*) Septicæmia,		5
Cattle,	4	
Hog,	1	
(*e*) Pneumonia,		5
Cattle,	2	
Hogs,	3	
(*f*) Nephritis,		1
Hog,	1	
(*g*) Endocarditis,		1
Cow,	1	
(*h*) Enteritis,		1
Hog,	1	
(*i*) Traumatic pericarditis,		1
Cow,	1	
(*j*) Phlebitis,		3
Calves,	3	
(*k*) Hepatic abscess,		1
Cow,	1	

SUMMARY — *Concluded.*

Reasons for condemnation — *Continued.*		
(*l*) Difficult parturition,		1
Cow,	1	
(*m*) Advanced pregnancy,		1
Cow,	1	
(*n*) Emaciation,		3
Cattle,	2	
Calf,	1	
(*o*) Rupture,		1
Hog,	1	
(*p*) Poisoned,		1
Calf,	1	
(*q*) Milk fever,		4
Cattle,	4	
(*r*) Bruised,		21
Calves,	20	
Hog,	1	
(*s*) Injured,		1
Cow,	1	
(*t*) Dead on arrival,		12
Cattle,	2	
Calves,	7	
Hogs,	2	
Sheep,	1	
(*u*) Weak condition,		7
Calves,	7	
(*v*) Improperly prepared,		1
Cow,	1	

Reasons for condemnation — *Concluded.*			
(*w*) Inspector not present,		2	
Cow,	1		
Calf,	1		
Total number of reasons for condemnation,			23
Disposition of condemned carcasses: —			
(*a*) Rendered,		401	
Cattle,	108		
Calves,	268		
Hogs,	24		
Sheep,	1		
(*b*) Buried,		46	
Cattle,	12		
Calves,	24		
Hogs,	10		
(*c*) Burned,		3	
Cow,	1		
Calves,	2		
(*d*) Fed to hogs,		23	
Calves,	23		
(*e*) Fed to hens,		4	
Calves,	4		
(*f*) Consumed by owner,		1	
Hog,	1		
Total number of dispositions of carcasses,			6

The following cities and towns reporting on the work of inspection rendered "Nothing to Report": —

Ashland,
Avon,
Ayer,
Bedford,
Bolton,
Boxborough,
Brookline,
Canton,
EVERETT,
Holbrook,
Hopedale,
Hull,
Littleton,
MALDEN,
MEDFORD,
Natick,
New Salem,
NEWTON,
Norfolk,
Plympton,
SALEM,
Salisbury,
Sherborn,
SOMERVILLE,
Stoneham,
Swampscott,
Winthrop.

During the month of July, 1914, convictions were secured against the following persons, either because of illegal stamping, or slaughtering without a license, or the inspector was not present at the time of slaughter: —

No.	Date.	Name of Defendant.	Place.	Result.
1	July 3, 1914	Joseph Katzeff, . . .	Medway, . .	Fined.
2	July 3, 1914	Nathan Rosen, . . .	Millis, . .	Fined.
3	July 3, 1914	Max Fanger, . . .	Millis, . .	Fined.
4	July 3, 1914	Max Fanger, . . .	Millis, . .	Fined.
5	July 10, 1914	Andrew Jones, . . .	Norfolk, . .	Case filed.
6	July 10, 1914	Andrew Jones, . . .	Norfolk, . .	Case filed.
7	July 10, 1914	Andrew Jones, . . .	Norfolk, . .	Case filed.

Total amount of fines imposed, $40.

The licenses of Messrs. Katzeff, Rosen and Fanger were revoked in accordance with paragraph 15 of the slaughtering laws of Massachusetts.

REPORT ON INSPECTION OF DAIRIES.

During the month of July, 1914, a special examination of dairies was made in compliance with a request from the Salem Board of Health to inspect the dairies supplying milk to the city of Salem.

The following tables, therefore, do not give a complete showing of the dairies in the towns mentioned: —

MASSACHUSETTS DAIRIES.

Place.	Number examined.	Class AA.	Class A.	Class B.	Unclean Dairies.	Per Cent. Clean Dairies.
Boxford, . . .	2	–	–	1	1	50.00
Danvers, . . .	22	–	3	13	6	72.73
Georgetown, . .	4	–	–	3	1	75.00
Hamilton, . . .	3	–	–	1	2	33.33
Lynnfield, . . .	1	–	–	–	1	–
Middleton, . . .	6	–	–	1	5	16.67
Newbury, . . .	3	–	–	–	3	–
North Reading, . .	3	–	–	2	1	66.67
Peabody, . . .	13	–	3	6	4	69.23
Rowley, . . .	10	–	–	4	6	40.00
Salem, . . .	3	–	–	1	2	33.33
Topsfield, . . .	19	–	3	3	13	31.58
Wenham, . . .	4	–	1	1	2	50.00
West Newbury, . .	5	–	–	–	5	–

NEW HAMPSHIRE DAIRIES.

PLACE.	Number examined.	Class AA.	Class A.	Class B.	Unclean Dairies.	Per Cent. Clean Dairies.
Farmington,	1	–	–	1	–	100.00
Hampton,	5	–	–	2	3	40.00
North Hampton,	10	–	–	3	7	30.00
Rochester,	2	–	–	2	–	100.00
Stratham,	2	–	–	2	–	100.00

The following dairies in Massachusetts were also inspected, but as a part of the general investigation: —

PLACE.	Number examined.	Class AA.	Class A.	Class B.	Unclean Dairies.	Per Cent. Clean Dairies.
Essex,	3	–	–	2	1	66.67
Gloucester,	1	–	1	–	–	100.00
Northampton,	19	1	1	3	14	26.32

Total number of dairies examined (including those in New Hampshire),	141
Total number of commendable dairies,	64
Total number of unclean dairies,	77
Percentage of dairies which passed inspection,	45.39

In addition to the above, 15 dairies were visited at which the sale of milk had been discontinued; also, 1 dairy was reported as making butter.

Included in the total number of Massachusetts dairies visited were 25 which had recently started in the milk-producing business and were inspected for the first time.

The names of the owners of the Massachusetts dairies found to be worthy of commendation follow: —

BOXFORD.

Class B.

	Per Cent.
Hooper Brothers,	60¼

DANVERS.

Class A.

	Per Cent.		Per Cent.
Endicott, W. C.,	84½	Rogers, D. P.,	89
Pierce, Thomas W.,	75¼		

Class B.

	Per Cent.		Per Cent.
Abbott, E. O.,	64¾	Learoyd, A. F.,	65¼
Allen, Elmer,	60½	McDonald, Thomas,	68¾
Connors, D. J.,	70½	Osgood, C.,	62½
Flint, Walter,	60	Pitman, A. A.,	68
Goodale, I. P.,	61½	Russell, Chandler,	72¼
Gould, Austin L.,	61¼	Tipert, Henry,	60¼
Jones, George H.,	73		

ESSEX.

Class B.

Andrews, Elias,	60	Elwell, Lewis,	66½

GEORGETOWN.

Class B.

Nelson, D. O.,	64	"Town Farm",	61
Pyne & Card,	60½		

GLOUCESTER.

Class A.

	Per Cent.
Babson, (Dr.) E. W.,	76¼

HAMILTON.

Class B.

Vaughn, George,	71

MIDDLETON.

Class B.

Cass & Daley,	66

NORTHAMPTON.

Class AA.

La Fleur, W. J.,	90¼

Class A.

Gustave, Otto,	76¼

Class B.

Allen & Abbot,	69½	Learned, E. K.,	74¼
Jager Brothers,	60		

NORTH READING.

Class B.

Hinman, George R.,	60	Turner, Joseph A.,	65

PEABODY.

Class A.

	Per Cent.		Per Cent.
Carten, John L.,	81½	Smith, (Mrs.) W. A.,	75¼
Rogers, (Mrs.) J. C.,	75¼		

Class B.

Bell, Pierce,	61½	Mason, Ben,	60
Berry, W. L.,	63¾	Roome, James A.,	63½
Harrigan, Daniel F.,	60	Sanders, Charles,	60½

ROWLEY.

Class B.

Bradstreet, (Mrs.) Addie,	60½	Edgerly, C. R.,	60
Bradstreet, John D.,	62¾	Knight, Thurman,	64½

SALEM.

Class B.

	Per Cent.
Sands, E. L.,	67¼

TOPSFIELD.

Class A.

Meredith Farm,	76½	Pierce, Thomas W.,	82½
Phillips, J. D.,	82¼		

Class B.

Dunleigh, Henry,	61	Williams, H. B.,	62¾
Tilton Brothers,	67½		

WENHAM.

Class A.

Daniels, A. L.,	78¾

Class B.

Pingree Farm,	64½

CLASSIFICATION OF DAIRIES.

AA — 90 to 100 per cent.
A — 75 to 90 per cent.
B — 60 to 75 per cent.
Below Class B (60 per cent.), unclean or dirty.

EXPERIMENTS TO DETERMINE IF PARALYZED DOMESTIC ANIMALS AND THOSE ASSOCIATED WITH CASES OF INFANTILE PARALYSIS MAY TRANSMIT THIS DISEASE.[1]

By Carl Ten Broeck, M.D., with an Introductory Note by Prof. Theobald Smith, M.D.
(From the Department of Comparative Pathology, Harvard University Medical School, Boston.)

Introduction.

The sporadic occurrence of poliomyelitis in numerous, apparently unrelated foci, and the tendency of the disease to appear in rural districts which have only slight intercourse with large centers of population, have led to the hypothesis of some animal reservoir for the virus. The incidence of epidemics in summer, when all animal life is most active, favors this hypothesis. On the other hand, poliomyelitis is inoculable only into monkeys and possibly into rabbits. Other species have shown themselves refractory. Even monkeys are not easily infected, and rabbits are as a rule so difficult to infect that their susceptibility is a matter of debate.

There still remains the hypothesis that certain animals may be carriers of the infection without becoming diseased. The infection may vegetate on mucous membranes without invading the central nervous system.

Hypotheses of this sort do not, as a rule, lead anywhere unless as guides to actual experiments which serve to test their validity. The material available for experimentation under the above hypotheses is so abundant that in planning some investigations to trace the virus of poliomyelitis into the lower animals we thought it best to begin with cases of paralysis not explainable as the result of injury, poisons or well-known infectious agents. Before detailing these experiments a brief survey of what is known of animal diseases simulating infantile paralysis will be in order.

There are several spontaneous diseases of animals associated with paralysis that have strong resemblances to infantile paralysis. P. H. Römer[2] discovered a disease among guinea-pigs which causes paralysis and death. It is due to a filterable agent and may be transmitted from guinea-pig to guinea-pig by the intracerebral method of inoculation. It is a meningo-myelo-encephalitis with lymphocytic infiltration.

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[1] The cost of this investigation was met by a fund generously contributed by the following gentlemen: Messrs. Frederick S. Converse, William H. Hill, Charles C. Jackson, Charles H. W. Foster, Moses Williams, Moses Williams, Jr., Charles Jackson, Robert Treat Paine, 2d, Frederick P. Royce, Francis R. Bangs, and "A Friend."

[2] Deutsche Med. Wochenschr., XXXVII., 1911, p. 1209.

M'Gowan and Rettie[1] describe a poliomyelitis in sheep known as "loupin ill," trembling, etc. This disease begins with fever, restlessness, excitability, trembling and muscular twitching, followed by coma and death or by paralysis producing various deformities and often complete loss of the use of the hind quarters.

The lesions of the central nervous system vary according as the animal suffered from the acute or the chronic type of the disease. In the latter, the pia, nerve roots, the gray and white matter and the perivascular sheaths are infiltrated with small round cells. The nerve cells, especially of the anterior horns of the cord, are in various stages of disintegration. Cultures were negative. Intracerebral inoculations of two sheep with brain tissue from acute cases produced no effect.

In the spinal cord and ganglia of a dog affected with paralysis, Flexner and Clark[2] found lesions closely resembling, but not identical with, poliomyelitis lesions as they are found in man and in inoculated monkeys. The lesions, most pronounced in the cervical and lumbar enlargements, consisted of perivascular infiltrations, hæmorrhage, œdema, infiltration and necrosis of the ground substance and necrosis of ganglion cells, which become at times replaced by small round cells.

Inoculation of two dogs and two monkeys (*Macacus rhesus*) led to no positive result. The animals were under observation for several months.

An infectious disease of horses affecting the central nervous system, which may appear both in sporadic and epidemic form and which has been investigated in Saxony, where it has been prevalent for some twenty years, has recently been studied histologically by E. Joest.[3] This author finds much resemblance between the lesions of poliomyelitis and of this horse disease. The disease is at its height in the spring of the year, and its infectiousness is very slight. The affected animal becomes dull and listless, but the paralyses are incomplete.

Joest finds that the pathological changes are chiefly in the brain. There is a marked lymphocytic infiltration of the perivascular lymph spaces, with a tendency to invasion of the nervous tissue. The spinal cord is much less involved.

Although a diplo-streptococcus has been described by several investigators as associated with the lesions, the etiology is not cleared up. Joest describes intranuclear bodies, and is inclined to regard them as belonging to the chlamydozoa of von Prowazek and to contain the virus of the disease.

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[1] Jour. Pathol. and Bacteriol., XVIII., 1913, p. 47.

[2] Jour. Exper. Med., XVII., 1913, p. 577.

[3] Handbuch d. path. Mikroorganismen, 2d edition, Vol. VI., p. 251.

Attention has been called to the occurrence of paralysis among domestic animals during epidemics or to individual paralyzed animals that have come in contact with cases in families.

Ed. Müller[1] calls attention to the statements which have appeared in medical writings concerning the possible relation between animals and infantile paralysis (Wickman, Krause, Wilke) and adds one case of his own. A child two years old had carried about and played with a paralyzed fowl. No occurrence pointing to contact either direct or indirect with another case could be discovered.

Bruno[2] gives details of two cases occurring in two children of the same family aged two and three years, respectively. The children had not come in contact with other children, but were restricted to a large garden containing poultry and a few sheep. About six weeks before the disease appeared in the children, the father had purchased a number of ducks from an establishment handling many thousands yearly. Five of the ducks became paralyzed, one died, one was killed and three recovered. Bruno does not hesitate to bring this disease of ducks into etiological relation with the cases of infantile paralysis.

Lust and Rosenberg[3] in studying an epidemic in and around Heidelberg fixed their attention upon paralysis in domestic fowls, which was quite common. They inoculated fowls with a suspension of brain and cord of a paralyzed fowl without success. Four young chickens were placed in a hospital ward with cases of poliomyelitis and fed with nasal secretion of such cases for nine days. This experiment also proved negative. Finally, they injected a strain of poliomyelitis virus into nine chickens, either into the brain or into the peritoneal cavity. This experiment likewise failed to produce the disease.

Neustaedter[4] states that two guinea-pigs contracted poliomyelitis by being kept in proximity to a severe case of inoculation poliomyelitis in a monkey. He also found that in one case swabbing the nasal mucosa with filtered virus from the cord of a monkey caused poliomyelitis in a guinea-pig. No subsequent confirmatory experiments have been reported.

The inoculability of the human virus into the lower animals has received considerable attention. Thus far, the tailed monkeys present the most reliable reaction to this virus after intracerebral inoculation. Rabbits have been tried by various experimenters with uncertain and equivocal results. H. K. Marks[1] has more recently gone over this problem again. He found that by using young rabbits, the virus at times may be transmitted through a short series of rabbits and be detected in the last of the series by the use of monkeys. In the experimental work described below, only monkeys were employed, because no other species could be relied upon to yield trustworthy results.

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[1] Die spinale Kinderlähmung, Berlin, 1910.

[2] Münch. Med. Wochenschr., 60, 1913, p. 1995.

[3] Münch. Med. Wochenschr., LXI., 1914, p. 120.

[4] Jour. A.M.A., LX., 1913, p. 982.

EXPERIMENTAL PART.

Method. — After having been kept under observation for some days the animals were killed, at first, by chloroform, later, as we did not know the effect of chloroform on the virus of poliomyelitis if such should be present on the mucous membranes, by a blow on the head followed by bleeding. A careful autopsy was made and portions of the cord and nasal mucosa removed for inoculation material. In the majority of cases the nasal mucosa was used for inoculation, as it has been shown that in the monkey, at least, the virus persists here long after it can be demonstrated in the cord.[2] We assumed that if the animals were to transmit the disease, they would be more apt to do so through the nose than in any other way that we know of at present. In some cases, however, both nasal mucosa and cord were used for inoculation.

The tissue was ground with sterile sand in a sterile mortar and suspended in salt solution. After standing in the refrigerator over night this suspension was passed through a sterile Berkefeld filter and one or two monkeys inoculated with the filtrate.

Using aseptic precautions and having the monkey under ether anæsthesia, we injected 4 to 6 cubic centimeters into the lateral ventricle. In a few cases we partially sterilized the suspension to be injected, by means of 0.5 per cent. phenol instead of passing it through a filter. The monkeys were kept under observation for at least two months and then, if they remained well, inoculated with tissue from another case, care being taken that it was from a different species than that of the first inoculation, to prevent anaphylactic reaction. In no case was a monkey used more than twice. We lost several monkeys from various causes, as will be seen in the notes, but in all except one case, one of the pair, inoculated from any one animal, lived throughout the incubation period of poliomyelitis. The monkeys used were *Macacus rhesus,* except Nos. 16, 17 and 19, which agreed most nearly with the species description of *Cereocebus galeritus.* The latter were susceptible to poliomyelitis, as we proved by inoculation.

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[1] Jour. Exper. Med., XIV., 1911, p. 116.

[2] Flexner and Clark, Jour. Amer. Med. Assoc., 1911, Vol. LVI., p. 585.

In order to show that by our methods we could produce the disease, we made the two following experiments as controls: —

R. L. — Boy, age 4, had a rise in temperature, pulse and respiration, with vomiting. The next day there was a complete paralysis of the left leg, and the knee jerks were absent. On the fifth day he died, showing at this time complete flaccid paralysis of both legs, left arm and partial paralysis of the right arm, marked difficulty in swallowing. Coarse bubbling rales throughout front and back of both lungs. Cord removed and sent to the State Board of Health, July 21, 1911.

The membranes of the cord showed an intense congestion in the lumbar region, and the vessels of the white matter are well marked. Near the cauda equina there is an intense congestion of the anterior horns and of the white matter. Microscopic examination shows the gray matter infiltrated with lymphocytes and red blood corpuscles, the normal tissue being almost entirely destroyed. Clinical and pathological diagnosis: acute poliomyelitis.

Cord suspended in salt solution, filtered and injected into the lateral ventricles of monkeys Nos. 5 and 6, July 22, 1911. Seventeen days later monkey No. 5 became paralyzed in the right leg, and the next day it had a flaccid paralysis of both hind legs. Nine days after monkey No. 6 was inoculated it became very nervous, lost its appetite, and two days later had a paresis of the left arm and both legs. Gradually, it recovered the use of its limbs, and two months after the inoculation was practically normal. Killed at this time, the autopsy showed lumbar cord slightly congested, the superficial vessels slightly prominent and the anterior horns somewhat reddened. No abnormality noted in the remainder of the cord or in the brain. Pleural and peritoneal cavities with contents normal. Microscopical examination shows a marked perivascular infiltration with lymphocytes in the lumbar cord and a degeneration of the anterior horn cells. A piece of muscle removed from the axilla showed marked atrophy.

Monkeys Nos. 18 and 24. — Inoculated Dec. 28, 1912, with 1 cubic centimeter of a 5 per cent. suspension of the cord of a monkey that had died from the effects of an inoculation with a strain of poliomyelitis virus received from the Hygienic Laboratory of the United States Public Health Service at Washington, D. C. Twelve days later these monkeys were found totally paralyzed, and died the next day. Microscopic examination of their central nervous systems showed the typical lesions of poliomyelitis.

Dogs.

Dog No. 57.[1] — Springfield, Aug. 19, 1911. Dog struck by an automobile two weeks ago. Spastic paralysis of hind legs with retention of feces. Autopsy showed a marked lateral curvature of the spine in the upper thoracic region with an enlargement of the bodies of the vertebræ. No inoculations made.

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[1] These numbers are running laboratory numbers and have no bearing on the number of cases of paralysis examined.

Dog No. 58. — From Dr. G., Boston, Sept. 11, 1911. History of paralysis. Dead when received. Slight indication of injections of minute vessels of pia. Post-mortem: putrefaction well under way.

Filtered suspension of cord injected into lateral ventricle of monkey No. 21. Death in a month from a colitis. No evidence of paralysis. Filtered suspension of nasal mucosa injected into lateral ventricle of monkey No. 22. No effects from inoculation after two months.

Dog No. 59. — North Andover, Sept. 22, 1911. Dog had been sick for about a month. Did not use left fore foot. There seemed to be a hyperæsthesia of all limbs. Chloroformed. Autopsy. Walls of stomach and small intestine thickened and congested. Cord apparently normal except in the lower cervical and thoracic regions, where the gray matter appears to be softer than normal. Inoculations not made as there was no apparent connection between this animal and any cases of poliomyelitis.

Dog No. 60. — West Harwich, Feb. 7, 1912. Spastic paralysis of hind legs with retention of urine and feces. First noticed ten days ago. Autopsy. About 10 centimeters above the lumbar enlargement of the cord for a space of about 3 centimeters the cord was found to be slightly larger, firmer and of a more pearly color than the adjacent tissue. On section a grayish white, pearly mass of tissue was seen replacing the gray matter and most of the white matter of the cord, leaving only a ring of the latter around the periphery. Microscopical examination showed that this tumor was probably a fibroma. No inoculations made as the paralysis was most probably due to the tumor.

Cattle.

Cattle No. 237. — Fairhaven, Nov. 8, 1911. Cow, six years old. Raised on the farm and was a great pet of the children. No cases of poliomyelitis for some years in Fairhaven. Two weeks ago it was noticed that there was a slight incoördination in the cow's movements. This increased until there was a complete paralysis of the hind quarters. Killed and autopsied by M. J. Curran, M.D.V., New Bedford, who reports ascites of the abdominal cavity, organs normal, and no signs of tuberculosis. Cord removed and sent to the State Board of Health.

Cord shows slight congestion. Suspended in salt solution, filtered and injected into the lateral ventricles of monkeys Nos. 18 and 22. Monkey No. 22 became blind and was killed a month and a half after the inoculation. Autopsy showed an internal hydrocephalus. Monkey No. 18 remained well for over two months following the inoculation.

Cattle No. 241. — Sharon. Case obtained by kindness of Dr. Mulvehill, March 1, 1912. Heifer, one year old. Complete motor paralysis of the hind quarters beginning four days ago. No known injury and no evidences of external injury. Autopsy. Distal 15 centimeters of lumbar cord bluish, swollen, with an irregular cavity following the lines of the gray matter and having a hæmorrhagic border. Microscopical examination of the cord shows no evidences of an inflammatory condition, but does show a diffuse hæmorrhage which has probably softened and produced the cavity. No evidence of injury to spine, but Dr. E. E. Southard, who was consulted, regarded the condition as probably due to trauma. No inoculations made.

Cattle No. 253. — Jan. 8, 1913, from Dr. Langdon Frothingham, three pieces of the fore brain weighing about 20 grams, the medulla and the first portion of the cord.

The brain had been sent in by Dr. Playdon of Reading, Mass., who states that before death the cow had a paralysis of its hind legs and that its head was twisted around as in milk fever. Negri bodies were not found by Dr. Frothingham.

The material was received in a putrid condition, so that microscopic examination was not attempted. The portions of brain and cord were ground in a mortar with sterile sand and suspended in 100 cubic centimeters of salt solution. The suspension was shaken for one hour in a machine, frozen and thawed three times, then centrifuged and the supernatant fluid passed through a Berkefeld filter.

Monkey No. 46 received 4 cubic centimeters of the filtrate into its right lateral ventricle and 42 cubic centimeters into its peritoneal cavity.

Monkey No. 58 received 5 cubic centimeters of the filtrate into its right lateral ventricle.

Monkey No. 46 was under observation for six months following the injection and remained perfectly well during this period. One month after monkey No. 58 had been inoculated, it developed a marked diarrhœa. This disappeared for a time, but reappeared about a month later, and three months after the inoculation the monkey died apparently from this chronic diarrhœa. Microscopical examination of the cord showed normal nerve cells and no perivascular infiltration.

Swine.

Swine, No. 101. — Woburn, Aug. 18, 1911. This pig comes from a neighborhood where there is a case of acute poliomyelitis. Along with four others, this pig was taken sick last winter. The nature of the sickness was not determined, but it was stated that during July there was a similar illness among the pigs, from which over a hundred died. Examination shows that the fore legs are used normally while the hind legs are totally paralyzed. Chloroformed and autopsied. Pig about 100 centimeters long and weighing about 80 to 100 pounds. Viscera in general normal, with the exception of the stomach mucosa, of which the fundus is marked by congestion and is pigmented. Slight erosions around margins of cardiac expansion. No parasites. A portion of the ileum near valve congested. Rectum for a distance of 15 centimeters uniformly distended with dry feces into a cylindrical mass about 3 centimeters in diameter. Urinary bladder well distended into a globular mass equal to two fists put together. Spinal cord at level of lumbar enlargement has a distended vein running along its dorsal aspect; several similar veins on ventral aspect. No other abnormalities noticed. The vertebræ in this region sawn through, but nothing unusual found. Microscopical examination negative.

Injected the filtered suspension of the nasal mucosa into the lateral ventricles of monkeys Nos. 1 and 2. Monkey No. 1 developed an internal hydrocephalus and died in about a month from the time of the inoculation without showing any signs of paralysis. Monkey No. 2 showed no effects from the inoculation after three months.

Swine No. 105. — North Dana, Feb. 20, 1912. One of five pigs that were taken sick last spring, the others dying. Examination shows a paralysis of the extensor muscles of the hind legs. Given morphine and bled to death. Autopsy showed the cord in the lower lumbar region to be possibly a trifle more moist and softer than normal. Microscopical examination negative.

The suspension of the nasal mucosa partially sterilized by means of 0.5 per cent. phenol, injected into the lateral ventricles of monkeys Nos. 32 and 33. No effect from the inoculation during the following two months.

Swine No. 106. — Westwood, Feb. 8, 1912. This pig came originally from a family where there was a case of acute poliomyelitis. Pig taken with an acute illness and died in twenty-four hours. Unable to use legs, which were hyperæsthetic and somewhat œdematous. Autopsy: white female pig weighing about 75 pounds. Post-mortem: decomposition advanced. Bloody around snout. The membranes of the spinal cord were of a purplish red color, but the individual vessels were not very prominent. In the lumbar region the cord was very soft, and the gray matter could not be distinguished from the white. In the dorsal region the cord was soft, yet the markings were distinct. At no place in the cord was there any apparent congestion. The vessels of the membranes covering the brain were markedly enlarged, but the diffuse reddening of the cord was not present. Peritoneal cavity distended with gas; contains considerable blood-stained fluid. Intestine purplish red in color and distended with gas. Not opened. Spleen not enlarged. Right lung crepitant but firm, not collapsed and dark red in color. Section shows a deeply congested tissue with dark clots in the vessels. Left lung less firm than the right, crepitant and on section of a bright red color.

Frozen sections of the cord showed an exudate of fibrin and polymorphonuclear leucocytes in the meninges, but no perivascular infiltration.

We were not successful in getting the suspension of the nasal mucosa sterile by means of 0.5 per cent. phenol, so that no inoculations were made.

Swine No. 107. — This pig was received May 27, 1912, from Westwood. Three months before a paralyzed pig (No. 106) had been received from the same neighborhood. There was a rather close association with a case of poliomyelitis.

On May 19, 1912, this pig became weak in its fore legs and its hind legs were paralyzed. When received at the laboratory, it was found that the hind legs were in a spastic condition and that the animal could move but could not stand on them. The fore legs were weak. The animal had a rectal temperature of 107.4 degrees. The pig was killed by a blow on the head. The autopsy showed a rather soft, moist cord, the markings of which were indistinct. The brain was apparently normal except for the congestion due to the blow. The liver, spleen, kidneys and adrenal appeared normal on macroscopic examination. The bladder was distended and the rectum was filled with hard feces. The small intestine was normal. The pancreas was firm and on section numerous bands of a firm, yellowish, soap-like substance were visible. The glands in the groin, under the sternum, at the angles of the jaw and in the mesentery were enlarged. Their cortex was hæmorrhagic, and on section they were light gray in color. The heart and lungs were apparently normal.

Microscopic examination of the tissues of this pig showed an early lymph-node tuberculosis, fat necrosis of the pancreas, together with many focal cell accumulations, accumulation of lymphocytes under the capsule of the adrenal and around the perilobular veins of the liver. There were numerous, relatively large, focal cell collections in the cortex of the kidneys which crowded upon and compressed the tubules. The cells were of the endothelial type. A few mitoses were seen. Necrosis absent. Most remarkable of all, a very evident perivascular lymphocytic infiltration of the vessels of the lumbar cord. There was no destruction of the nerve cells nor accumulation of lymphocytes in the anterior horns of the gray matter.

Portions of the cord of this pig were placed in 0.5 per cent. phenol and kept in the refrigerator until Nov. 8, 1912 (five and one-third months), when they were washed, suspended in salt solution, and the suspension passed through a Berkefeld filter.[1] Five cubic centimeters of this filtrate were injected into the lateral ventricle of the brain of monkey No. 43 and 50 cubic centimeters into the peritoneal cavity of monkey No. 44. Both animals remained perfectly well throughout the following four months.

Swine No. 114. — This pig was received Oct. 25, 1913, from Framingham. White male pig weighing about 50 pounds. Owner had previously killed one paralyzed pig. This one eats normally. Limbs so weak that animal lies down, but is able to walk to reach his food. Reflexes present. Killed after a week's observation, by cutting vessels of neck after stunning with a blow. All the viscera were normal. There were some fresh small hæmorrhages in muscles of back, probably result of death struggle. Some were found in psoas and muscles of diaphragm. Slight hæmorrhagic infiltration of lymph sinus, lymph nodes of neck, mediastinum, aorta and pelvis. Microscopic examination of muscular tissue fixed and sectioned shows hæmorrhages in the septa between bundles of fibers. Red corpuscles well preserved. No cellular infiltration or other signs of inflammation. The cord of this animal was ground up with sand, suspended in five parts of salt solution by weight, shaken and refrigerated for one day; filtered through

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[1] Flexner, Clark and Amoss found that the cord of a child which had died of infantile paralysis, kept for fifteen months in 0.5 per cent. phenol, produced typical paralysis when injected into monkeys (Jour. Exper. Med. XIX., 1914, p. 205).

Berkefeld filter. Filtrate in refrigerator for two days, then injected into monkey No. 63, 2.3 cubic centimeters intracerebral, and 20 cubic centimeters into abdominal cavity. Monkey well after four months.

Fowls.

Fowl No. 25. — Lexington, Aug. 10, 1911. This fowl was received from a family where there is a case of acute poliomyelitis. The only sick chicken in the flock. Stands erect with its sternum pushed out and sways from side to side. Falls over when touched, probably from weakness. No paralysis. Feathers around anus soiled. August 12, dead. Autopsy shows brain and cord normal. Anterior nares plugged with a light yellow fibrinous exudate. Eyes moist but without exudate. Nothing abnormal found in the pleural or peritoneal cavities. Diagnosis: avian diphtheria.

Filtered suspension of nasal mucosa injected into the lateral ventricles of monkeys Nos. 9 and 10. No effect from the inoculations in the following two months.

Fowl No. 26. — Woburn, Aug. 25, 1911. This fowl comes from a flock where two or three chickens are said to have died in a mysterious manner, and where the man who cared for them had an attack of acute poliomyelitis that caused his death. Chicken walks with a limp, as though its foot had been injured. No evident paralysis. Killed by a blow on the head. Autopsy showed fatty degeneration of the liver but no other abnormality.

The filtered suspension of the nasal mucosa was injected into the lateral ventricles of monkeys Nos. 19 and 20, and the filtered suspension of the cord into a lateral ventricle of monkey No. 18. All monkeys remained well during the following two months.

Fowls Nos. 27, 28 and 29. — These three fowls were received Sept. 1, 1911, from Boxford. The principal trouble, as far as their walking went, was an apparent loss of equilibrium. When first received, they would stagger when they walked, but later any movement would cause them to fall forward on their heads. After falling they would lie for some time. There was no evident paralysis. For three years chickens on this farm have had some difficulty in walking which appeared when they were about three months old and which progressed until they died. They have evidently had good care and the owner cannot account for their condition.

Fowl No. 27 was chloroformed September 11, when it was nearly dead. Filtered suspension of nasal mucosa was injected into the lateral ventricle of monkey No. 24; filtered suspension of cord injected into the lateral ventricle of monkey No. 23. Both monkeys remained well during the following three months.

Fowls Nos. 28 and 29 were, on Oct. 24, 1911, bled to death, and the nasal mucosæ of both suspended in salt solution, filtered and injected into the lateral ventricle of monkey No. 17. The brains and cervical cords of the two fowls were suspended in salt solution, filtered and injected into the lateral ventricle of monkey No. 16. The monkey showed no effects from the inoculation during the following two months. Immediately after monkey No. 17 had been inoculated, it was totally paralyzed. A little later it had some convulsions, and the next day it had a left-sided hemiplegia. Two days later it died, evidently from some accident during the operation, the nature of which could not be determined at autopsy.

Fowl No. 30. — Leominster, Sept. 23, 1911. This fowl comes from a flock where there have been several cases of paralysis among the chickens, and where the boy who was intimately associated with them has an acute attack of poliomyelitis. The chicken showed a complete paralysis of the legs, which by October 3 had somewhat improved, but which still prevented it from walking. Bled to death and autopsied. Nothing abnormal found.

Filtered suspension of nasal mucosa injected into the lateral ventricle of monkey No. 26. Well for the following two months. Filtered suspension of cord injected into the lateral ventricle of monkey No. 25. Eight days later the monkey succumbed to an attack of colitis and nephritis.

Fowl No. 40. — Ipswich, March 17, 1914. A very fat adult Plymouth Rock hen. The fowl is unable to stand on its feet apparently on account of a paralysis of the muscles of the back. No atrophy of the muscles can be demonstrated. The toes are flaccid, but are moved by the hen. Both legs seem equally involved. The knee jerks are present and equal. The crossed knee jerks are marked. There is no wing drop and the head is held normally. The comb and feathers are in good condition and no ectoparasites can be demonstrated.

This fowl has not been associated with a case of poliomyelitis and there are no other cases of paralysis among the chickens of this flock, though they have occurred in the flock of the breeder from whom this chicken originally came.

On March 21 the fowl was chloroformed and bled to death. There is no atrophy of the muscles of the back or legs and no evidence of an injury to the spine. The abdominal and thoracic viscera and the central nervous system appear to be normal.

Histological examination of the cord at different levels showed a marked perivascular cell infiltration in the gray matter of the lumbar cord in the pia and, to a slight extent, in the white matter. The same condition was found in sections of the dorsal region, but not so pronounced. None was seen in a section of the cervical region and of the midbrain. The infiltrating cells were of lymphoid type. There was no evidence of neuronophagia, but a small number of the nerve cells were swollen, the Nissl bodies absent, and the cytoplasm very attenuated, almost free from stain. Sections from the cords of fowls Nos. 26 and 27, and one other not referred to above, showed no such changes.

The cord, brain and nasal mucosa were ground with sterile sand and suspended in 75 cubic centimeters of salt solution. The suspension was shaken for one hour and placed in the refrigerator for forty-eight hours. It was then centrifugalized and the supernatant fluid passed through a Berkefeld filter.

On March 24 monkeys Nos. 63 and 64 were each given an intracerebral (intraventricular) injection of 5 cubic centimeters of the filtrate and an intra-abdominal injection of 20 cubic centimeters of the same.

Four days after the inoculation both monkeys were very excitable and had some difficulty in climbing. This lasted for a few days and then gradually passed away, leaving the monkeys apparently normal. At no time was there a definite paralysis. Monkey No. 63 is still normal two months after the inoculation, but monkey No. 64 died suddenly six weeks after the inoculation without showing any paralysis or any other symptoms of note.

A very careful autopsy failed to reveal any abnormalities, except slightly congested lungs and a very soft, slightly enlarged spleen. From this last organ a bacterium was obtained which has not been classified, but which is not pathogenic for guinea-pigs.

Sections of the cord of this monkey show normal nerve cells and no perivascular infiltration.

Horses.

Horse No. 183. — Aug. 4, 1911. Diphtheria-antitoxin horse has had a drooping of the left eyelid and left side of the lip along with a paralysis of the left fore leg for the last month. Chloroformed. Autopsy showed a blood clot in the Sylvian aqueduct ¼ by 1 inch in size.

The filtered suspension of the nasal mucosa was injected into the lateral ventricles of monkeys Nos. 7 and 8. Both monkeys remained well during the following two months.

Horses Nos. 205, 206 and 208. — These three horses in the same stable in Medford were taken sick in March, 1912, at about the same time with fever, difficulty in swallowing, and a paresis of the legs which made it necessary to suspend them in slings. In Wakefield there was a similar disease among the horses belonging to a man who, along with the owner of the Medford horses, had bought some frozen potatoes, which had been fed in both stables. This was the only known connection between the two places and there was no known association with poliomyelitis. Dr. Playdon of Reading reports that some frostbitten potatoes fed to his rabbits caused similar symptoms, with death in four out of the five animals affected. The disease in the horse was also very fatal, as four of the Wakefield and three of the Medford horses died.

Horse No. 205. — This horse died during the night of March 22–23. Autopsy, March 23, 1912, several hours post-mortem. In the mucosa of the small intestine were found a few hæmorrhagic spots 0.5 centimeter in diameter. The lungs showed a marked pneumonic process on the right side. Nothing else of note was found in the peritoneal or pleural cavities. On opening the skull, considerable cloudy yellow fluid escaped. The vessels of the brain were prominent, and in the region of the left Rolandic fissure over an area 5 centimeters in diameter the cortex was of a decided pinkish hue. Similar areas of less extent were present in other places on the surface of the cerebrum. Nothing abnormal was found in the brain on section. The cord in the region of the fourth, fifth and sixth cervical vertebræ was apparently normal. Microscopic examination showed a slight hæmorrhagic exudate in the meninges of the brain and cord.

The nasal mucosa was treated with 0.5 per cent. phenol, suspended in salt solution, and injected into the lateral ventricles of monkeys Nos. 36 and 37. Both monkeys remained well during the following two months.

Horse No. 206. — Autopsy, March 26, 1912, eighteen hours post-mortem. Marked pneumonia of both lungs. Other viscera normal. Considerable blood-stained fluid surrounded the brain and the surface of the latter was congested, but nothing abnormal was found on section. The cord in the region of the fifth cervical vertebra showed nothing more than a congestion of the membranes. Cultures made from the fluid surrounding the brain showed a variety of organisms which were not pathogenic to mice. Microscopic examination of the central nervous system showed a congestion of the vessels of the cerebral cortex but no signs of an inflammatory reaction. No inoculations were made as the disease was regarded as identical with that of horse No. 205.

Horse No. 208. — This horse died April 9; autopsy, April 10, 1912. Cord and brain packed in ice and sent to the laboratory. The brain showed a marked surface congestion, but was otherwise apparently normal. One portion of the cord was apparently normal, while continuous with it was a region where the membranes were markedly congested and the substance of the cord softened. Microscopic examination of the tissues was unsatisfactory on account of the decomposition that had taken place before fixation. There was a marked hæmorrhage into the membranes but no signs of inflammation. In some portions of the cord there was a loss of tissue which involved the gray matter, but this was probably due to the poor fixation.

The cord was treated with 0.5 per cent. phenol, suspended in salt solution, and injected into the lateral ventricles of monkeys Nos. 38 and 39. Both monkeys remained well during the following two months.

Cats.

Cat No. 28. — Boston, May 26, 1911. Cat was picked up on the street. Flaccid paralysis of both hind legs with retention of urine and feces. Chloroformed June 3. Autopsy showed two small hæmorrhagic spots in the dorsal region of the cord. No apparent injury to the spine. Microscopical examination negative.

Filtered suspension of nasal mucosa injected into lateral ventricle of monkey No. 1. Filtered suspension of cord and medulla injected into lateral ventricle of monkey No. 2. Both monkeys appeared perfectly well during the following two and a half months.

Cat No. 29. — Fitchburg. On June 12, 1911, the cat was noticed to favor the left fore leg, and some heat and tenderness were found below the elbow. On June 16 he had a fit and on examination it was found that he could not use either fore leg.

Received at the laboratory Aug. 12, 1911. Examination showed a paralysis of the extensor muscles of both fore legs so that they were sharply flexed at the elbow. Cat ate and felt well during the time it was under observation. August 23, no change in its condition. Killed by a blow on the head. The autopsy showed gray matter of cord hæmorrhagic in the cervical region. (This may have been due to the blow on the head.) Elbow joints freely movable and apparently normal. No visible atrophy of muscles.

Filtered suspension of nasal mucosa injected into the lateral ventricles of monkeys Nos. 16 and 17. Neither monkey showed any effects from the inoculation during the following two months.

Cat No. 31. — Oct. 16, 1911, from Dr. M. F. Hoar of Fall River. Cat was well but had been associated with a case of acute poliomyelitis in a child. Killed by a blow on the head.

Filtered suspension of the nasal mucosa injected into the lateral ventricles of monkeys Nos. 7 and 8. Monkey No. 8 remained well for over two months following the inoculation. A month after monkey No. 7 was inoculated it became blind, but showed no paralysis. Autopsy showed a marked internal hydrocephalus.

Cats Nos. 32 and 33. — Oct. 16, 1911, from Dr. M. F. Hoar of Fall River. These healthy cats came from a family where there was a case of acute poliomyelitis in a child. Killed by a blow on the head. Filtered suspension of the nasal mucosa injected into the lateral ventricles of monkeys Nos. 9 and 10. Monkey No. 9 remained well for over two months following the inoculation. Nearly a month after monkey No. 10 was inoculated, he stopped eating and in another two weeks was very weak, but showed no signs of any paralysis. Autopsy showed a thickening of the walls of the colon with an enlargement of the mesenteric glands. Central nervous system normal.

Cat No. 34. — Chelmsford, March 28, 1912. Cat has been the pet of a child who is affected with acute poliomyelitis. Shows no signs of disease. Killed by a blow on the head. Suspension of nasal mucosa treated with 0.5 per cent. phenol, injected into the lateral ventricles of monkeys Nos. 34 and 35. Monkey No. 34 was well for over a month and then died from an attack of colitis. Monkey No. 35 was well during the following two months.

Cat No. 35. — Amherst, Oct. 5, 1912. This animal was sent to the laboratory with the history that it had had a bad cough and that it had been intimately associated with two children who were suffering from acute poliomyelitis. As the cat had been introduced into the family about three weeks before the onset of the disease in the children there seemed to be a possibility that it might have brought the infection to them.

The cat was under observation in this laboratory for a month and showed no symptoms of paralysis, cough or loss of appetite. It was killed by a blow on the head and the organs appeared normal on gross and microscopical examination.

The nasal mucosa was placed in 0.5 per cent. phenol for twenty-four hours, washed, ground with sand, and suspended in sterile salt solution. After standing over night in the refrigerator, the suspension was passed through a sterile Berkefeld filter.

Five cubic centimeters of this filtrate were injected into the lateral ventricle of monkey No. 47. The monkey was under observation for ten months and remained perfectly well throughout this period.

Forty-five cubic centimeters of the filtrate were injected into the peritoneal cavity of monkey No. 48. This animal remained well for two months and then developed a diarrhœa and died seventy days after the inoculation from an acute colitis.

Cat No. 36. — Amherst, Nov. 6, 1912. This animal comes from a house about one-quarter mile away from the one where cat No. 35 lived and where there were two cases of poliomyelitis.

This cat was not a pet and spent most of its time around the barn. For the past few months the animal has appeared ill, but has been around the place as usual. One week before it was shipped to the laboratory, a paralysis of the hind legs was noticed.

The animal was received late in the evening and the next morning was found dead, so that no clinical observations were made on it in this laboratory.

Autopsy shows an extensive pneumonia accompanied by a purulent exudate from the nose. The abdominal viscera are apparently normal. The brain and cord on gross examination are normal except in the thoracic region, where the cord appears to be softer and more moist than normal.

Microscopical examination shows an acute bronchopneumonia and an infiltration of lymphocytes in the meninges surrounding the cord.[1]

Portions of the brain and cord of this cat were placed in 50 per cent. glycerine over night, washed, ground up with sand, and suspended in salt solution. This suspension was kept in the refrigerator for three days and then passed through a sterile Berkefeld filter.

Five cubic centimeters of this filtrate were injected into the lateral ventricle of monkey No. 45 and 50 cubic centimeters into the peritoneal cavity of monkey No. 46.

Eight days after the inoculation monkey No. 45 died from an acute colitis, but monkey No. 46 was under observation for a year and failed to show any signs of paralysis or other disturbances.

Cat No. 37. — This cat was brought to the laboratory Dec. 9, 1912, by Dr. S. of Cambridge, who stated that about three weeks ago one of three cats belonging to his family became listless and refused to eat. A few days later it lost the use of its hind legs, dragging them behind it as it walked. This lasted for about three days, after which time it gradually recovered the use of its legs and is now apparently well. The fore legs were not affected and there were no gastro-intestinal disturbances. About eight days from the onset of the disturbance in the first cat, the second cat began to be listless and showed the same symptoms of paralysis as the first one. The cat brought to the laboratory is the third one belonging to the family, and it is supposed to be in the first stages of the disease.

Examination shows an adult yellow and white castrated cat in good condition. The animal eats very little and remains quiet in its cage. When placed on the floor, it runs and leaps in an apparently normal manner.

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[1] From later studies made on cats it seems probable that this animal was suffering from an infection with bacillus bronchisepticus. In dogs an infection with this organism may be followed by a paralysis, but we have not observed this in cats.

On December 12 the cat appears to be stupefied and refuses to eat. When placed on the floor, it moves in a normal manner. Jan. 4, 1913, the cat is perfectly well again. On this date it was killed by a blow and autopsied. Nothing abnormal found beyond a moderate impaction of the rectum with dry feces and a slight distension of the urinary bladder.

The nasal mucosa of cat No. 37 was removed, ground with sterile sand and suspended in sterile salt solution. After standing in the refrigerator for three days, this suspension was filtered and 5 cubic centimeters of the filtrate injected into the lateral ventricle of monkeys Nos. 55 and 56. Monkey No. 55 received in addition 28 cubic centimeters of the filtrate into its peritoneal cavity. Both monkeys made a good recovery from the ether, but monkey No. 55 died twenty-three days and monkey No. 56 sixteen days after the inoculation. Both showed a generalized tuberculosis and neither showed signs of a paralysis between the time of inoculation and the time of death.

As the symptoms shown by cat No. 37 seemed to be of some significance, another cat was placed with it in the same cage. This second animal was under observation forty days and remained well during this period.

Rats.

Two rats were trapped in a house in Waltham in which a case of poliomyelitis had occurred. One of them died and was in a state of decomposition when received at the laboratory. The other was well.

The nasal mucosa, tongue, brain and cord, heart, spleen, kidney, bladder and portions of the liver, lung and rectum with contents from both rats were ground with sand, suspended in salt solution, shaken for two hours, and placed in the refrigerator. After standing for seven days the suspension was filtered through a Berkefeld filter, tested for sterility, and 6 cubic centimeters injected into the lateral ventricles of monkeys Nos. 61 and 62. The latter also received 30 cubic centimeters into the peritoneal cavity. Both monkeys made a good recovery from the ether and beyond a slight attack of diarrhœa remained well during the following five months that they were under observation.

On Nov. 8, 1913, two barn rats were brought to the laboratory with the message that they had been caught in a house in Worcester where there was a case of poliomyelitis. One rat was dead and on autopsy appeared normal.

The second rat sat "hunched" up in the corner of the cage and was evidently very sick. Chloroformed and autopsied. All four feet were very much swollen as a result of œdema. The viscera appeared normal.

Portions of the central nervous system, nasal mucosa, tongue, heart, lungs, spleen, liver, kidney, large intestine with contents and the urinary bladder of both rats were ground with sterile sand, suspended in 100 cubic centimeters of salt solution, shaken for three hours, and allowed to stand in the refrigerator for six days. The suspension was filtered through a Berkefeld filter, tested for sterility and 2⅓ cubic centimeters injected into the lateral ventricles of monkeys Nos. 65 and 66. Monkey No. 66 received in addition 22 cubic centimeters of the filtrate into the peritoneal cavity.

Both monkeys showed a good ether recovery, but three hours after the inoculation were very sick, lying on the floor of their cage completely prostrated. For the next three days the monkeys refused to eat and were very sick, but after this time, they gradually improved. During the following three and a half months that they were under observation, they appeared perfectly well.

Flies.

Nineteen specimens of *Stomoxys calcitrans* were caught Nov. 23, 1912, in the antitoxin horse stables of the State Board of Health at Forest Hills. They were ground up with sterile sand and suspended in 40 cubic centimeters of salt solution, placed in refrigerator for twelve days, filtered through a Berkefeld filter and 4 cubic centimeters injected into one lateral ventricle of each of two monkeys (Nos. 51 and 52). No. 52 received also 33 cubic centimeters into the peritoneal cavity. Both monkeys were under observation for four months and remained well.

On Dec. 7, 1912, this experiment was repeated with twenty-two *Stomoxys* obtained from the same stable. The filtrate was prepared as above, with the exception that the suspension remained in the refrigerator but five days. Monkey No. 53 received 5 cubic centimeters of the filtrate into a lateral ventricle and 14 cubic centimeters into the peritoneal cavity. The monkey died in forty-three days as a result of caseous (tubercular) pneumonia and miliary tuberculosis.

SUMMARY.

Besides the animals noted above we have received and autopsied eight fowls, two cats and two cows. Some of these showed evidence of injury to account for their paralysis, some were in a marked state of decomposition, or else were not paralyzed and had not been associated with cases of poliomyelitis, so that they were not used for inoculation.

We have received in all forty-eight animals, and material from thirty of these has been injected into monkeys. Of these thirty animals there were four rats, seven fowls, nine cats, three horses, four swine, one dog and two cows. Fifteen were paralyzed, four had a questionable paralysis, and eleven were free from paralysis. Thirteen of these animals had been more or less closely associated with human cases of poliomyelitis, and in the other seventeen no such association was known. *In no case did the monkeys inoculated from any of these animals show any signs of a paralysis or symptoms which would indicate that they were infected with poliomyelitis.* In the cords of those that died no perivascular infiltration with lymphocytes was found nor was there a degeneration of the cells of the anterior horns.

A summary of the inoculations made and the source of the material used is given in the following table: —

ANIMALS FURNISHING MATERIAL TO BE INJECTED.			Material used (Suspensions).	Site of Injection.	Amount injected (Cubic Centimeters).	Monkey injected (Number).	Result.
Species and Number.	Condition.	Exposed to Infantile Paralysis.					
Dog No. 58.	Paralyzed.	Not known.	Filtered cord.	Lateral ventricle.	5	21	Death; acute colitis.
				Lateral ventricle.	5	22	No effect.
Cattle No. 237.	Paralyzed.	No.	Filtered cord.	Lateral ventricle.	4	18	No effect.
				Lateral ventricle.	4.5	22	Killed; internal hydrocephalus.
Cattle No. 253.	Paralyzed.	Not known.	Filtered brain and cord.	Lateral ventricle. Peritoneal cavity.	4 42	46	No effect.
				Lateral ventricle.	5	58	Death in three months; chronic colitis.
Swine No. 101.	Paralyzed.	In neighborhood.	Filtered nasal mucosa.	Lateral ventricle.	4	1	Death; internal hydrocephalus.
				Lateral ventricle.	4	2	No effect.
Swine No. 105.	Paralyzed.	Not known.	Nasal mucosa treated with 0.5 per cent. of phenol.	Lateral ventricle.	4	32	No effect.
				Lateral ventricle.	2	33	No effect.
Swine No. 107.	Paralyzed.	Yes.	Cord treated with 0.5 per cent. of phenol for five and one half months, then suspended and filtered.	Lateral ventricle.	5	43	No effect.
				Peritoneal cavity.	50	44	No effect.
Swine No. 114.	Paralyzed(?).	No.	Cord filtered.	Lateral ventricle. Peritoneal cavity.	2.3 20	63	No effect.
Fowl No. 25.	Avian diphtheria.	Yes.	Filtered nasal mucosa.	Lateral ventricle.	1.5	9	No effect.
				Lateral ventricle.	3	10	No effect.
Fowl No. 26.	Limps but is not paralyzed.	Yes.	Filtered nasal mucosa.	Lateral ventricle.	5	19	No effect.
			Filtered nasal mucosa.	Lateral ventricle.	5	20	No effect.
			Filtered cord.	Lateral ventricle.	4	18	No effect.

Animals furnishing Material to be injected.			Materials used (Suspensions).	Site of Injection.	Amount injected (Cubic Centimeters).	Monkey injected (Number).	Result.
Species and Number.	Condition.	Exposed to Infantile Paralysis.					
Fowl No. 27.	No evident paralysis.	Not known.	Filtered nasal mucosa.	Lateral ventricle.	5	24	No effect.
			Filtered cord.	Lateral ventricle.	5	23	No effect.
Fowls Nos. 28 and 29.	No evident paralysis.	Not known.	Filtered nasal mucosa.	Lateral ventricle.	4	17	Death two days after inoculation.
			Filtered brain and cord.	Lateral ventricle.	4	16	No effect.
Fowl No. 30.	Paralyzed.	Yes.	Filtered cord.	Lateral ventricle.	4	25	Death; acute colitis and nephritis.
			Filtered nasal mucosa.	Lateral ventricle.	4	26	No effect.
Fowl No. 40.	Paralyzed.	No.	Filtered suspension of brain cord and nasal mucosa.	Lateral ventricle. Peritoneal cavity.	5 20	63	Excitable four days after inoculation; recovered.
				Lateral ventricle. Peritoneal cavity.	5 20	64	Excitable four days after and death six weeks after inoculation.
Horse No. 183.	Paralyzed.	No.	Filtered nasal mucosa.	Lateral ventricle.	3	7	No effect.
				Lateral ventricle.	4	8	No effect.
Horse No. 205.	Paralyzed.	Not known.	Nasal mucosa treated with 0.5 per cent. of phenol.	Lateral ventricle.	4	36	No effect.
				Lateral ventricle.	4	37	No effect.
Horse No. 208.	Paralyzed.	Not known.	Cord treated with 0.5 per cent. of phenol.	Lateral ventricle.	4	38	No effect.
				Lateral ventricle.	4	39	No effect.
Cat No. 28.	Paralyzed.	Not known.	Filtered nasal mucosa.	Lateral ventricle.	4	1	No effect.
			Filtered cord and medulla.	Lateral ventricle.	4	2	No effect.
Cat No. 29.	Paralyzed.	Not known.	Filtered nasal mucosa.	Lateral ventricle.	4	16	No effect.
				Lateral ventricle.	4	17	No effect.
Cat No. 31.	Healthy.	Yes.	Filtered nasal mucosa.	Lateral ventricle.	4	7	Death; internal hydrocephalus.
				Lateral ventricle.	4	8	No effect.

Animals furnishing Material to be injected.			Material used (Suspensions).	Site of Injection.	Amount injected (Cubic Centimeters).	Monkey injected (Number).	Result.
Species and Number.	Condition.	Exposed to Infantile Paralysis.					
Cats Nos. 32 and 33.	Healthy.	Yes.	Filtered nasal mucosa.	Lateral ventricle.	4	9	No effect.
				Lateral ventricle.	4	10	Death; chronic colitis.
Cat No. 34.	Healthy.	Yes.	Nasal mucosa treated with 0.5 per cent. of phenol.	Lateral ventricle.	4	34	Death; acute colitis.
				Lateral ventricle.	4	35	No effect.
Cat No. 35.	Apparently healthy.	Yes.	Nasal mucosa treated with 0.5 per cent. of phenol, then filtered.	Lateral ventricle.	5	47	No effect.
				Peritoneal cavity.	45	48	Death seventy days after inoculation; acute colitis.
Cat No. 36.	Paralyzed.	Indirectly.	Filtered brain and cord.	Lateral ventricle.	5	45	Death; acute colitis.
				Peritoneal cavity.	50	46	No effect.
Cat No. 37.	No paralysis.	No.	Filtered nasal mucosa.	Lateral ventricle. Peritoneal cavity.	5 28	55	Death; tuberculosis.
				Lateral ventricle.	5	56	Death; tuberculosis.
Rats (Waltham).	No paralysis.	Yes.	Portions of various organs suspended in salt solution and filtered.	Lateral ventricle.	6	61	No effect.
				Lateral ventricle. Peritoneal cavity.	6 30	62	No effect.
Rats (Worcester).	No paralysis.	Yes.	Portions of various organs suspended in salt solution and filtered.	Lateral ventricle.	2.5	65	No effect.
				Lateral ventricle. Peritoneal cavity.	2.5 22	66	No effect.
Flies (Stomoxys calcitrans).	Normal.	No.	Bodies suspended and filtered.	Lateral ventricle.	4	51	No effect.
				Lateral ventricle. Peritoneal cavity.	4 33	52	No effect.
Flies (Stomoxys calcitrans).	Normal.	No.	Bodies suspended and filtered.	Lateral ventricle. Peritoneal cavity.	5 14	53	Death in forty-three days; generalized tuberculosis.

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Approved by
The State Board of Publication.

PUBLIC HEALTH BULLETIN.

Wm. C. Hanson, M.D., *Acting Commissioner of Health.*

PASTEUR TREATMENT.

The Hygienic Laboratory of the Public Health Service at Washington supplies to State health officials virus for the treatment of rabies. The virus is sent in the form of small pieces of rabbit cord in bottles containing glycerine. Each piece represents a single dose. These pieces of cord must be emulsified before being used. It necessitates some technical skill in its preparation and use. The United States public health authorities in sending the virus stipulate that it shall be administered under the immediate supervision of the State health authorities.

In accordance with this stipulation Pasteur treatment is now administered in various parts of the State by physicians who are in the employ of the State Department of Health. Early in August a complete course of treatment was given to a young man in Hyde Park who was bitten by a stray dog. Unfortunately, the dog was killed and the carcass was disposed of without a microscopic examination.

On August 20 a dog, which later upon microscopic examination of his brain proved to be rabid, ran through East Cambridge and Charlestown and was finally killed. It bit 8 people on its way, 4 in Cambridge and 4 in Boston. The 4 Boston cases are being treated at the Boston City Hospital. The 4 Cambridge cases are receiving Pasteur treatment from one of the State physicians.

Dog Bite and Rabies.

The following circular, relative to dog bite and rabies, was issued on Aug. 25, 1914, and a copy sent to the local board of health and chief of police in every city and town in the State: —

Dog Bite and Rabies.

Prevalence of Dog Bite.

Dogs run about more freely during the summer months, hence the reason for the greatest number of dog bites at this season of the year.

Is the Dog Mad? Has the Dog Rabies? Will the Person bitten have Rabies?

Unless a dog is extremely violent it should not be killed, because if killed early in the course of rabies, microscopic examination of the dog's head may fail to show evidence of the disease. The physician will then be in doubt about giving the Pasteur treatment to the person bitten. Moreover, the person bitten suffers with unnecessary mental anxiety.

First in importance, therefore, is to find and keep the dog under observation. If ten days elapse and no symptoms appear, the Pasteur treatment is unnecessary.

Local Treatment of the Wound.

Wounds caused by the bite of a dog or other animal suspected of having rabies should at once be thoroughly cauterized with fuming nitric acid, preferably by means of a small glass rod or pipette.

Laboratory Diagnosis.

When a dog or other animal shows symptoms of rabies it should be chloroformed or shot. If shot it should be done with a pistol and the bullet enter the forward part of the brain, or the heart; otherwise important regions for examination may be destroyed. The head should then be securely packed in sawdust and ice and shipped with all possible haste to a local laboratory for examination, or to the Department of Animal Industry, State House, Boston, Mass., and the said Department notified of such shipment. Avoid shipping so that the head will reach the State House on a Saturday afternoon or the afternoon before a holiday, and hold in cold storage.

Compulsory Reporting of Cases of Dog Bite and Rabies.

All cases of rabies are now required by law to be reported to the State Department of Health through the board of health of the city or town in which the case occurs, and every case of dog bite should be so reported for investigation.

Suspicious Symptoms of Rabies in Dogs or Other Animals.

If a dog or other animal shows suspicious symptoms of rabies, the fact should be reported immediately to the Department of Animal Industry so that an inspector of animals may be detailed to act promptly and effectively.

Circulars containing a description of the symptoms of rabies may be had upon application to the city or town clerk, to whom such circulars are supplied by the State Department of Health, as required by section 132 of chapter 102 of the Revised Laws.

Pasteur Treatment.

Pasteur treatment is now administered in various parts of the State by physicians who are in the employ of the State Department of Health. The virus used is furnished by the Hygienic Laboratory of the United States Public Health Service, and is administered in accordance with their stipulations.

William C. Hanson, M.D.,
Acting Commissioner of Health.

Aug. 25, 1914.

PELLAGRA.

During the month of August two cases of pellagra have been reported to the State Department of Health. An investigation of the disease is now being carried on by the Public Health Service of Washington, under the charge of Surgeon Joseph Goldberger. To assist this governmental investigation, information was obtained from Surgeon-General Rupert Blue as to what specific facts relative to the cases reported in Massachusetts Dr. Goldberger would desire. We were informed that the following is the information desired relative to the cases of pellagra reported: —

1. Sex, color and occupation of patient.
2. Economic status.
3. Number of individuals in the same household.
4. Relation to other cases.

This data will be obtained for all cases of pellagra reported in the Commonwealth and forwarded to Dr. Goldberger of the Public Health Service.

TYPHOID FEVER IN NORTH ADAMS.

Between August 16 and September 1, 39 cases of typhoid fever have been reported to the board of health of North Adams. The source of the infection of these cases was traced to a milk distributor, Mr. X, who was handling milk while ill with the disease. Mr. X had not been feeling well for some weeks; on August 11 he consulted his physician, and again on August 14 or 15, when he was advised to discontinue his work. On August 17 his illness was reported to the local board of health as typhoid fever.

From the beginning of his illness until the time he took to his bed, Mr. X had ample opportunity of infecting his milk supply. All but three of the cases reported were definitely known to have been exposed to infection from this milk.

This outbreak emphasizes the special care required on the part of those who handle milk to refrain from having anything to do with the milk during any period of illness, even if not severe enough to confine them to bed. Such illness may be the predecessor of a contagious disease, and widespread outbreaks of typhoid and scarlet fever have been caused by milk infected in that manner.

LABORATORY EXAMINATIONS OF FOODS AND DRUGS.

The following tables present the results of the laboratory examinations of samples of food and drugs collected during the month of August, 1914: —

The cities and towns in which samples were collected were: Acton, Arlington, Bedford, Billerica, Boston, Cambridge, Canton, Carlisle, Chatham, Chelmsford, Chelsea, Concord, Dedham, Dracut, Fall River, Fitchburg, Framingham, Gloucester, Greenfield, Groton, Haverhill, Hull, Lexington, Littleton, Lowell, Lynn, Maynard, Milford, Milton, Montague, Nantucket, New Bedford, North Reading, Norwood, Oak Bluffs, Palmer, Peabody, Plymouth, Sandwich, Sherborn, Somerville, Springfield, Stoughton, Sudbury, Wakefield, Waltham, West Springfield, Westford, Weston, Woburn.

Summary of Analyses.

Articles examined.	Number found to be of Good Quality.	Number adulterated or varying from the Legal Standard.	Total.
Baking powder,	1	–	1
Canned fruits and vegetables,	1	–	1
Cocoa,	1	1	2
Coffee,	2	–	2
Confectionery,	2	–	2
Cordials,	2	–	2
Cream,	15	2	17
Drugs,	82	13	95
Eggs,	–	2	2
Flour,	1	–	1
Flavoring extracts: —			
Lemon,	1	–	1
Peppermint,	2	–	2
Fruit juices: —			
Apple,	1	–	1
Cranberry,	1	–	1
Grape,	1	–	1
Lime,	1	–	1
Ice cream,	17	3	20
Jams and jellies,	2	–	2
Lard,	1	–	1
Meat products: —			
Frankfort sausages,	1	1	2
Milk,	379	323	702
Olive oil,	1	–	1
Pop corn,	1	–	1
Pickles,	2	2	4
Sausage color (Vegecol),	1	–	1
Spices,	2	–	2
Syrups,	1	–	1
Table sauces,	2	–	2
Wine,	1	–	1
Totals,	525	347	872

PROSECUTIONS FOR VIOLATIONS OF THE LAW RELATING TO FOOD AND DRUGS.

Five convictions were secured during the month of August, 1914, for selling adulterated food and drugs, as follows: —

No.	NAME OF DEFENDANT.	Place.	Character of Article sold.
1	William Leipple, .	Greenfield, .	Alcohol (not U. S. P.).[1]
2	Harry Parker, .	Peabody, . .	Milk (total solids, 9.18).[2]
3	Elbert R. Boyd, .	Stoneham, .	Spirit of Nitrous Ether (not U. S. P.).
4	James P. Lynde, .	Palmer, . .	Spirit of Peppermint (not U. S. P.).
5	Walter E. Dyson, .	Cambridge, .	Tincture of Iodine (not U. S. P.).[1]

[1] Appealed.

[2] Watered.

Fines imposed, $150.

SAMPLES OF FOOD WHICH UPON EXAMINATION WERE FOUND TO BE ADULTERATED.

SWEET COCOA.[1]

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
25298	Edgar S. Delapenha, Boston, ...	Sweet Lunch Cocoa. Rockwood & Co., Brooklyn, N. Y.

EGGS.[2]

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
7857-S	New York Egg and Fruit Company, Boston.	
7859-S	New York Egg and Fruit Company, Boston.	

ICE CREAM.[3]

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
7831-S	John A. Cook, Provincetown, ...	Vanilla (6.38 per cent. fat).
7833-S	Edward M. King, Provincetown, ...	Strawberry (6 per cent. fat).
7825-S	Ruel Mette, Provincetown, ...	Vanilla (3.05 per cent. fat).

MEAT PRODUCTS.[4]

Frankfort Sausage.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
7883-S	Cunningham Supply Company, Boston.	

PICKLES.[5]

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
8474-R 6313-S	Fruit Store, Haverhill.	

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[1] Per cent. of sugar not stated.

[2] Decomposed.

[3] Below fat standard.

[4] Contained 5 per cent. starch.

[5] Contained alum.

Samples of Drugs which upon Examination were found to be adulterated.

Spirit of Anise.

Number of Sample.	Dealer.	Wholesaler or Manufacturer.	Per Cent. of Required Strength.
9112-R	Harry Langdon, 72 Cross Street, Somerville, .	– –	83

Spirit of Nitrous Ether.

Number of Sample.	Dealer.	Wholesaler or Manufacturer.	Per Cent. of Required Strength.
9116-R	Neil Blanc, Springfield, ...	– –	4
25316	J. J. Cronin, Lawrence, ...	The Imperial, 27-29 Hampden Street, Springfield.	0
25317	J. J. Cronin, Lawrence, ...	Forest City Extract Company, Portland, Me.	0
8992-R	John L. Dunn, Hyde Park, ...	– –	71
8984-R	Thomas F. Fallon, Cleary Square, Hyde Park, .	– –	73
9038-R	Thomas F. Fallon, Cleary Square, Hyde Park, .	– –	83
8988-R	J. W. Kilgore, 54 Fairmount Avenue, Hyde Park,	– –	75
9042-R	J. W. Kilgore, 54 Fairmount Avenue, Hyde Park,	– –	50
8017-S	W. H. Leach & Co., Plymouth, ...	– –	65
8990-R	C. W. Lund, Hyde Park, ...	– –	75
9044-R	C. W. Lund, Hyde Park, ...	– –	80

Spirit of Peppermint.

Number of Sample.	Dealer.	Wholesaler or Manufacturer.	Per Cent. of Required Strength.
q 14364	W. R. Proctor, Jarves Street, Sandwich, . .	– –	80

Samples of Milk and Cream which upon Examination were found to be adulterated.

Number of Sample.	Name of Dealer, Wholesaler or Producer.	Result of Analyses.
25407	Arakeli Arakellien, Chelmsford, . .	Total solids, 11.80 per cent.; fat, 3.70 per cent.; contained added water.
25408	Arakeli Arakellien, Chelmsford, . .	Total solids, 11.40 per cent.; fat, 3.50 per cent.; contained added water.
25409	Arakeli Arakellien, Chelmsford, . .	Total solids, 10.30 per cent.; fat, 3.10 per cent.; contained added water.
25410	Arakeli Arakellien, Chelmsford, . .	Total solids, 10.90 per cent.; fat, 3.30 per cent.; contained added water.
25411	Arakeli Arakellien, Chelmsford, . .	Total solids, 11.80 per cent.; fat, 3.80 per cent.; contained added water.
25412	Arakeli Arakellien, Chelmsford, . .	Total solids, 11.90 per cent.; fat, 3.90 per cent.; contained added water.
25390	Baldwin's Lunch, Springfield, . .	(Cream.) Fat, 12.50 per cent.; contained added water.
8003-S	C. A. Cummings, East Lexington, .	Total solids, 11.50 per cent.; fat, 2.70 per cent.; proteins, 3.03 per cent.; skimmed milk.
q 14373	Leonard M. Doane, Chatham, . .	Total solids, 10.04 per cent.; fat, 2.60 per cent.; contained added water.
q 14369	Frank Eldridge, Chatham, . . .	Total solids, 11.12 per cent.; fat, 3.70 per cent.; contained added water.
25486	M. Feeley, Stoughton, ...	Total solids, 13.70 per cent.; fat, 5.60 per cent.; contained added water.
8037-S	Fred L. Fletcher, Chelmsford, . .	Total solids, 10.28 per cent.; fat, 3.20 per cent.; contained added water.
8039-S	Fred L. Fletcher, Chelmsford, . .	Total solids, 10 per cent.; fat, 2.80 per cent.; contained added water.

SAMPLES OF MILK AND CREAM WHICH UPON EXAMINATION WERE FOUND TO BE ADULTERATED — *Concluded.*

Number of Sample.	Name of Dealer, Wholesaler or Producer.	Result of Analyses.
8041-S	Fred L. Fletcher, Chelmsford, . .	Total solids, 10.09 per cent.; fat, 3.20 per cent.; contained added water.
25313	J. Frankel, New Bedford, . . .	Total solids, 10.80 per cent.; fat, 2.40 per cent.; proteins, 3.01 per cent.; skimmed milk.
q 14414A	H. F. Hamner, North Reading, . .	Total solids, 11 per cent.; fat, 3.40 per cent.; contained added water.
q 14222	Kenerson Milk Company, Lynn, . .	Total solids, 11.10 per cent.; fat, 2.40 per cent.; proteins, 2.87 per cent.; skimmed milk.
25309	M. London, New Bedford, . . .	Total solids, 11.20 per cent.; fat, 2.60 per cent.; proteins, 3.03 per cent.; skimmed milk.
25198	F. Masteria, New Bedford, . . .	Total solids, 11.46 per cent.; fat, 3.35 per cent.; contained added water.
25199	F. Masteria, New Bedford, . . .	Total solids, 11.40 per cent.; fat, 3.25 per cent.; contained added water.
25295	McCann Brothers, Lawrence, . . .	Total solids, 10.10 per cent.; fat, 2.80 per cent.; contained added water.
25296	McCann Brothers, Lawrence, . . .	Total solids, 12 per cent.; fat, 4.30 per cent.; contained added water.
25399	Kerkor Mickeal, Chelmsford, . . .	Total solids, 11.50 per cent.; fat, 4.10 per cent.; contained added water.
25400	Kerkor Mickeal, Chelmsford, . . .	Total solids, 9.80 per cent.; fat, 2.70 per cent.; contained added water.
25401	Kerkor Mickeal, Chelmsford, . . .	Total solids, 12.40 per cent.; fat, 4.50 per cent.; contained added water.
25402	Kerkor Mickeal, Chelmsford, . . .	Total solids, 11.40 per cent.; fat, 3.70 per cent.; contained added water.
25403	Kerkor Mickeal, Chelmsford, . . .	Total solids, 12.60 per cent.; fat, 4.90 per cent.; contained added water.
25404	Kerkor Mickeal, Chelmsford, . . .	Total solids, 11.16 per cent.; fat, 3.50 per cent.; contained added water.
25405	Kerkor Mickeal, Chelmsford, . . .	Total solids, 11.70 per cent.; fat, 4.70 per cent.; contained added water.
25394	J. Sheerin, Chelmsford, ...	Total solids, 10.10 per cent.; fat, 2.70 per cent.; contained added water.
25395	J. Sheerin, Chelmsford, ...	Total solids, 9.50 per cent.; fat, 2.65 per cent.; contained added water.
25396	J. Sheerin, Chelmsford, ...	Total solids, 10.60 per cent.; fat, 3.30 per cent.; contained added water.
25397	J. Sheerin, Chelmsford, ...	Total solids, 10.56 per cent.; fat, 3.25 per cent.; contained added water.
25398	J. Sheerin, Chelmsford, ...	Total solids, 10.20 per cent.; fat, 3 per cent.; contained added water.
q 14207	Mary L. Smith, Hull, ...	Total solids, 10.90 per cent.; fat, 2.70 per cent.; proteins, 3.05 per cent.; skimmed milk.
q 14208	Mary L. Smith, Hull, ...	Total solids, 9.50 per cent.; fat, 3 per cent.; contained added water.
q 14209	Mary L. Smith, Hull, ...	Total solids, 10.90 per cent.; fat, 2.40 per cent.; proteins, 3.07 per cent.; skimmed milk.
25459	Springfield Creamery Branch, Springfield.	(Cream.) Fat, 21.50 per cent.; contained added water.
25485	Harry Tolman, Stoughton, . . .	Total solids, 13.10 per cent.; fat, 4.90 per cent.; contained added water.
25282	F. H. Willard, Lawrence, . . .	Total solids, 11.40 per cent.; fat, 2.50 per cent.; proteins, 3.16 per cent.; skimmed milk.
25283	F. H. Willard, Lawrence, . . .	Total solids, 11.40 per cent.; fat, 2.50 per cent.; proteins, 3.16 per cent.; skimmed milk.
25208	Louis Willett, Fall River, . . .	Total solids, 11.96 per cent.; fat, 3.80 per cent.; contained added water.
25209	Louis Willett, Fall River, . . .	Total solids, 11.78 per cent.; fat, 4 per cent.; contained added water.

SLAUGHTERING AND MEAT INSPECTION.

During the month of August, 1914, the following convictions were secured because the inspector was not present at the time of slaughter:

No.	Date.	Name of Defendant.	Place.	Result.
1	Aug. 6, 1914	George Steinman, . .	Springfield, .	Fined.
2	Aug. 6, 1914	Abraham Burstein, . .	Springfield, .	Fined.

Total amount of fines imposed, $20.

COLD STORAGE OF FOOD.

ARTICLES IN COLD STORAGE CONDEMNED UPON PHYSICAL AND CHEMICAL EXAMINATIONS AS UNFIT FOR FOOD.

Date.	Articles.	Weight (Pounds).	Reasons.	Disposition.
Aug. 5, 1914	Venison, . .	30	Decomposed, ...	Buried.
Aug. 7, 1914	Squabs, . .	20	Decomposed, ...	Rendered.
Aug. 7, 1914	Swordfish, .	69	Soiled, ...	Rendered.
Aug. 19, 1914	Swordfish, .	50	Soiled and dried, . .	Rendered.
Aug. 19, 1914	Swordfish, .	116	Soiled and dried, . .	Rendered.
Aug. 20, 1914	Hams, . .	866	Decomposed, ...	Rendered.
Aug. 25, 1914	Mutton, . .	120	Decomposed, ...	Rendered.
Aug. 28, 1914	Mutton, . .	108	Tainted, soiled and dried, .	Rendered.
Aug. 31, 1914	Calves' heads, .	408	Decomposed, . . .	Rendered.
Aug. 31, 1914	Beef hearts, .	45	Soiled and dried, . .	Rendered.
Total, .	. . . . .	1,832		

CHEMICAL EXAMINATIONS OF SAMPLES OF COLD-STORAGE GOODS.

Article.	Number found to be of Good Quality.	Number found to be Unfit for Food.	Total Number of Samples examined.
Egg whites, ...	1	–	1
Egg yolks, ...	1	–	1
Totals, ...	2	–	2

INSPECTION OF DAIRIES.

During the month of August, 1914, 170 dairies were examined in the following places: —

Place.	Number examined.	Class AA.	Class A.	Class B.	Unclean Dairies.	Per Cent. Clean Dairies.
Carver,	2	–	–	–	2	–
Hanson,	8	–	–	3	5	37.50
Lakeville,	4	1	2	1	–	100.00
Middleborough,	24	–	1	7	16	33.33
Plympton,	3	–	–	1	2	33.33
Quincy,	47	–	4	26	17	63.83
Randolph,	24	–	1	10	13	45.83
Raynham,	18	–	–	2	16	11.11
Wareham,	10	–	–	2	8	20.00
Watertown,	11	–	2	5	4	63.64
Whitman,	19	–	–	10	9	52.63

Total number of dairies examined,	170
Total number of commendable dairies,	78
Total number of unclean dairies,	92
Percentage of dairies which passed inspection,	45.88

In addition to the above, 45 dairies were visited at which the sale of milk had been discontinued; also, 36 dairies were reported as producing less than 20 quarts of milk a day.

Included in the total number of dairies visited were 45 which had recently started in the milk-producing business and were inspected for the first time.

The names of the owners of the dairies found to be worthy of commendation follow: —

HANSON.

Class B.

	Per Cent.		Per Cent.
Clark, C. F.,	60	Oertel, Charles A.,	66
Howland, Calvin L.,	67		

LAKEVILLE.

Class AA.

	Per Cent.
Bowen, E. A.,	92

Class A.

Phillips, Benjamin,	79¾	Roach, Arthur,	75

Class B.

	Per Cent.
Peirce, W. C.,	61½

Middleborough.

Class A.

	Per Cent.
Kinsman Brothers,	81½

Class B.

	Per Cent.		Per Cent.
Holmes, Benjamin E.,	67	Mostrom, O. G.,	68½
Kingsland Brothers,	64¾	Shaw, Charles,	60¾
Maddigan, J. F.,	64¾	Standish, H. A.,	68½
Morse, George H.,	60¼		

Plympton.

Class B.

	Per Cent.
Perkins, Charles B.,	60½

Quincy.

Class A.

National Sailors' Home,	89½	White Brothers,	78
Sears, (Mrs.) R. A.,	79	Young, E. F.,	75

Class B.

Bowen, Frank L.,	61½	Kennard, H. G.,	70
Brown, Mary J.,	63½	Kundsin, (Mrs.) J.,	64½
Carroll, Ambrose F.,	62	McCormick, Francis,	65½
Darr, A.,	64½	Moorhead, James,	67
Dennehy, T. D.,	74½	Niemi, Solomon,	66
Fitzgerald, John J. (Estate),	61	Nordberg, Andrew H.,	66½
Goldstein, Rose,	63½	Pope, Hubert G.,	65
Gordon, Morris,	67	Sprude Brothers,	70
Goucher, C. A.,	72	Steer, Max,	62½
Hodgkinson, B. F.,	70½	Sturgis, W. H., & Son,	71
Hunter, (Mrs.) Clarence,	72	Svard, Edla E.,	61
Johnson, Charles O.,	70	Wetmore, G. A.,	63
Kelley, William,	60½	Zarvattoni, Stephen,	67

Randolph.

Class A.

	Per Cent.
Nelson Brothers,	75¾

Class B.

Bowley, Charles L.,	60	Randell, N. F.,	68¾
Burrell, E. F.,	61	Stetson, Lincoln,	61½
Clark, Patrick F.,	67½	Swan, Albert W.,	63
Larsen, Peter,	60¼	Tucker, Alfred H.,	60¾
Powers, Charles R.,	69¾	Wales, Frank C.,	62½

RAYNHAM.

Class B.

	Per Cent.		Per Cent.
Newman, (Mrs.) Mary,	60½	Goodwin, Herbert S.,	62½

WAREHAM.

Class B.

Galligan, James (Estate),	71¼	Mackie, John,	60

WATERTOWN.

Class A.

Conners, James,	82	Harrington, Everett W.,	85¾

Class B.

Barker, Howard,	66½	Shanahan, Patrick,	64¾
Lindsey, Robert,	63½	Sullivan, E. J.,	67½
Nugent, Joseph M.,	66½		

WHITMAN.

Class B.

Carleton, E. K.,	60½	Prouty, C. S. & J. N.,	68½
Churchill, B. F.,	66½	Reed, Irving,	64¼
Dudley, William H.,	69	Smith Brothers,	66¼
Harris, Charles A.,	72½	Smith, H. W.,	64½
Phillips, Charles,	60¼	Vaughan, A. L.,	61¼

CLASSIFICATION OF DAIRIES.

AA = 90 to 100 per cent.
A = 75 to 90 per cent.
B = 60 to 75 per cent.
Below Class B (60 per cent.), unclean or dirty.

RETURNS OF DISEASES.

Cases of Diseases declared by the State Department of Health to be Dangerous to the Public Health.

[Under the provisions of section 52 of chapter 75 of the Revised Laws.]

DISEASE.	Week ending —					
	Aug. 1.	Aug. 8.	Aug. 15.	Aug. 22.	Aug. 29.	Total.
Diphtheria,	78	89	84	74	61	386
Measles,	92	65	50	38	24	269
Scarlet fever,	59	58	43	58	27	245
Typhoid fever,	48	41	59	68	50	266
Tuberculosis, pulmonary,	105	122	111	121	90	549
Tuberculosis, meningitis,	5	3	5	5	1	19
Tuberculosis, other forms,	13	5	6	9	2	35
Cerebro-spinal meningitis,	2	2	1	1	3	9
Whooping cough,	61	36	53	32	13	195
Varicella,	24	6	7	14	6	57
Ophthalmia neonatorum,	40	51	61	68	38	258
Anterior poliomyelitis,	5	6	3	1	5	20
Trachoma,	2	7	2	–	1	12
Tetanus,	1	3	–	1	–	4
Pellagra,	–	1	1	–	–	2

Cases of Infectious Diseases not included in the Above Table.

[Cases not notifiable under the provisions of section 52 of chapter 75 of the Revised Laws.]

DISEASE.	Week ending —					
	Aug. 1.	Aug. 8.	Aug. 15.	Aug. 22.	Aug. 29.	Total.
Diarrhœa,	7	–	2	–	–	9
Bronchitis,	–	1	–	1	–	2
Sore throat,	–	1	–	–	–	1
Mumps,	–	1	3	–	1	5
Hydrophobia,	–	1	–	–	–	1
Erysipelas,	–	–	–	1	1	2

RETURNS OF DEATHS.

Deaths from Diseases declared by the State Board of Health to be Dangerous to the Public Health.

[Under the provisions of chapter 210, Acts of 1913.]

DISEASE.	Week ending —					
	Aug. 1.	Aug. 8.	Aug. 15.	Aug. 22.	Aug. 29.	Total.
Diphtheria,	5	6	8	4	7	30
Scarlet fever,	5[1]	1	1	1	1	9
Typhoid fever,	3	4	3	4	4[1]	18
Tuberculosis, pulmonary,	46	68[2]	55[1]	38[2]	52[3]	259
Tuberculosis, meningitis,	13[4]	7[1]	4	7[4]	4	35
Tuberculosis, other forms,	7[1]	5	3	6	4	25
Measles,	5	1	2	1	–	9
Varicella,	–	–	–	1	–	1
Whooping cough,	4	8[1]	3	2	4	21
Anterior poliomyelitis,	1	–	–	–	–	1
Cerebro-spinal meningitis,	2	2	–	1	–	5
Tetanus,	1	2	–	1	–	4

[1] One nonresident.

[2] Four nonresident.

[3] Two nonresident.

[4] Three nonresident.

NEW LEGISLATION.

Acts of 1914, Chapter 792.

An Act to create a state department of health and to amend the public health laws.

Be it enacted, etc., as follows:

Section 1. There is hereby created a state department of health which shall exercise all the powers and perform the duties now conferred and imposed by law upon the state board of health. The state department of health shall consist of a commissioner of health and a public health council. There shall also be directors of divisions, district health officers and other employees as hereinafter provided.

Section 2. The commissioner of health shall be appointed by the governor, with the advice and consent of the council, and he shall be a physician skilled in sanitary science and experienced in public health administration. The term of office of the commissioner of health shall be five years. He shall receive an annual salary of seventy-five hundred dollars and shall devote his entire time to his official duties. The commissioner of health shall be the administrative head of the state department of health. His powers and duties shall be to administer the laws relative to health and sanitation and the regulations of the department; to prepare rules and regulations for the consideration of the public health council; and, with the approval of the public health council, to appoint and remove directors of divisions, district health officers, inspectors and other necessary employees, and to fix their compensation, subject to the approval of the governor and council, within the limitations of appropriations therefor. Directors of divisions and district health officers shall be exempt from civil service regulations. The commissioner of health shall submit annually to the public health council a report containing recommendations in regard to health legislation; and he shall perform all executive duties now required by law of the state board of health and such other duties as are incident to his position as chief executive officer. He may direct any executive officer or employee of the state department of health to assist in the study, suppression or prevention of disease in any part of the commonwealth.

Section 3. The public health council shall consist of the commissioner of health and six members, hereinafter called the appointive members, at least three of whom shall be physicians, and who shall be appointed by the governor, with the advice and consent of the council. Of the members first appointed, two shall hold office until the first day of May in the year nineteen hundred and fifteen, two until the first day of May in the year nineteen hundred and sixteen, and two until the first day of May in the year nineteen hundred and seventeen, and the terms of office of the said members thereafter appointed, except to fill vacancies, shall be three years. Vacancies shall be filled by appointment of the governor, with the advice and consent of the council, for the unexpired term. The public health council shall meet at least once in each month, and at such other times as they shall determine by their rules, or upon the request of any four members, or upon request of the commissioner of health. The appointive members shall receive ten dollars a day while in conference, and their necessary travelling expenses while in the performance of their official duties. It shall be the duty of the public health council to make and promulgate rules and regulations; to take evidence in appeals; to consider plans and appointments required by law; to hold hearings; to submit annually to the general court, through the governor, a report, including recommendations as to needed health legislation; and to discharge other duties required by law; but it shall have no administrative or executive functions.

Section 4. There shall be in the state department of health such divisions as the commissioner of health may, with the approval of the public health council, from time to time determine. The commissioner of health shall appoint and may remove, with the approval of the public health council, a director to take charge of each division, and shall prescribe the duties of such division. The compensation of directors of divisions shall be fixed by the commissioner of health, within the limits of appropriations therefor, and subject to the approval of the governor and council.

Section 5. The commissioner of health, with the approval of the public health council shall, from time to time, divide the state into eight health districts and shall appoint and may remove a district health officer for each district, with the approval of the public health council, at a compensation, subject to the approval of the governor and council, not exceeding thirty-five hundred dollars a year. The district health officers shall not engage in any other occupation and shall give their entire time to the performance of their duties. The commissioner of health may, from time to time, order two or more of said district health officers to work in one district in order to study, suppress or prevent disease. Each district health officer shall have all the powers and perform the duties now provided by law for inspectors of health and further shall, under the direction of the commissioner of health, perform such duties as may be prescribed by, and shall act as the representative of the commissioner of health and under his directors shall secure the enforcement within his district of the public health laws and regulations. Said district health officers shall be graduates of an incorporated medical school admitted to practice in the commonwealth, or shall have had at least five years' experience in public health duties and sanitary science.

Section 6. For carrying out the purposes of this act there shall be appropriated for the purposes of the state department of health, over and above the amount already appropriated for the state board of health for the year nineteen hundred and fourteen, the sum of ten thousand dollars.

Section 7. Present employees shall be continued in office until their successors are appointed and qualified, or until removed by the commissioner: *provided, however,* that no employee shall be removed who was appointed, or is now employed, under the provisions of the civil service laws and regulations, other than for cause, except division heads and district health officers who shall be appointed as hereinbefore provided.

Section 8. Sections one, two and three of chapter seventy-five of the Revised Laws and all other acts and parts of acts inconsistent herewith are hereby repealed. [*Approved July 7, 1914.*

PUBLIC HEALTH BULLETIN

ISSUED MONTHLY

BY THE

STATE DEPARTMENT OF HEALTH

OF MASSACHUSETTS

SEPTEMBER, 1914

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Approved by
The State Board of Publication.

PUBLIC HEALTH BULLETIN.

WM. C. HANSON, M.D., *Acting Commissioner of Health.*

THE ISSUANCE OF PERMITS TO MILK PRODUCERS AND DEALERS.

The following statement, issued on Sept. 8, 1914, was sent by the secretary of the Massachusetts Milk Inspectors' Association to all of the local boards of health in the Commonwealth: —

MASSACHUSETTS STATE DEPARTMENT OF HEALTH, BOSTON.

To the Board of Health.

The following suggestions of the Massachusetts Milk Inspectors' Association, relative to the enforcement of the provisions of chapter 744 of the Acts of 1914 as to the issuing of permits to milk producers and dealers, have the approval of the Commissioner of Health: —

First. — That permits to milk producers be granted subject to the dairy attaining a minimum score of 50 on the latest form of the United States score card.

Second. — That permits to both producers and dealers be granted subject to compliance with the rules and regulations concerning milk, in force in the respective cities and towns.

Model forms of permits are enclosed. Copies of the United States Score Card may be obtained upon application to the United States Department of Agriculture.

WM. C. HANSON, M.D.,
Acting Commissioner of Health.

In co-operation with the Massachusetts Milk Inspectors' Association: John J. McGrath, Salem, *President;* Clifford W. Shippee, Gardner, *Secretary.*

BOSTON, Sept. 8, 1914.

RABIES.

A number of inquiries have been received by the State Department of Health relative to the circular "Dog bite and Rabies," which has been issued by the department. The questions relate to the time when the Pasteur treatment is to be started, how to obtain the virus, and the relation between the local animal inspector and the Department of Animal Industry. The following circular letter to boards of health was, therefore, issued by the Acting Commissioner of Health on Sept. 30, 1914: —

To the Board of Health.

GENTLEMEN: — A circular was recently sent to you from the State Department of Health relative to dog bite and rabies. I wish once more to call your attention to the necessity of starting antirabic treatment as soon as possible after the person is bitten. Persons bitten by animals suspected of having rabies should receive the antirabic treatment whether or not the suspicion is confirmed by microscopical examination of the brain of the animal, inasmuch as the Negri bodies, which are regarded as specific of the disease, are not always present, possibly because they have not developed to a demonstrable condition at the time the animal was killed.

Should you have a person to whom the Pasteur treatment is to be given notify promptly the office of the State Department of Health, and immediate arrangements will be made for the administration of the virus by one of our State physicians. Both the virus and its administration are free of cost.

The request in the circular that notice be given to the Department of Animal Industry of any animals showing signs suspicious of rabies is not intended as a substitute for the requirement of section 5, chapter 608 of the Acts of 1912, which reads: —

> The board of health of a city or town, any member or agent thereof or any other person who has knowledge of or reason to suspect the existence of any contagious disease among any domestic animals in this commonwealth, or that any domestic animal is affected with such contagious disease, whether such knowledge is obtained by personal examination or otherwise, shall immediately give notice thereof in writing to the commissioner of animal industry, or to an inspector of animals for the city or town where the animal is kept.

It would be well for your board to request that reports be made to the local inspector of animals as well as to the Department of Animal Industry. It is hoped that with such notification, both to the local inspector and to the Commissioner of Animal Industry, prompt, efficient and co-operative measures may be carried out in dealing with the animal in question.

DISEASES DANGEROUS TO THE PUBLIC HEALTH.

Owing to certain conditions which arose, it seemed extremely desirable, in the interests of maintaining the public health of the State, to amend the list of diseases formerly declared by the State Board of Health to be reportable. A petition, for instance, had been received from a town in the Commonwealth, signed by several hundred citizens, stating that malaria was so prevalent there that the factories and other industries were crippled. It was forthwith thought advisable to make malaria a reportable disease, so that its prevalence in certain parts of the State might be lessened and preventive measures undertaken.

Another illustration of the desirability of amending the list of reportable diseases is that of dog bite requiring antirabic treatment. Inasmuch as the State Department of Health is now administering the Pasteur treatment through its State physicians, it became necessary, of course, that the department be informed at the earliest possible moment of any case requiring the treatment. For the above and similar reasons the list of diseases dangerous to the public health has been amended and the following circular was issued by the Acting Commissioner of Health on Sept. 22, 1914: —

Diseases Dangerous to the Public Health.

The following is an amended list of diseases declared by the State Department of Health to be reportable under the provisions of sections 49, 50 and 52 of chapter 75 of the Revised Laws, as amended by chapter 480 of the Acts of 1907. Householders and physicians must now give immediate notice, the latter in writing over their own signatures, to the local board of health of all cases of: —

- Actinomycosis.
- Anterior poliomyelitis.
- Anthrax.
- Asiatic cholera.
- Chicken pox.
- Diphtheria.
- Dog bite (requiring antirabic treatment).
- Dysentery: —
  - (*a*) Amebic.
  - (*b*) Bacillary.
- Epidemic cerebro-spinal meningitis.
- German measles.
- Glanders.
- Hookworm disease.
- Infectious diseases of the eye: —
  - (*a*) Ophthalmia neonatorum.
  - (*b*) Suppurative conjunctivitis.
  - (*c*) Trachoma.
- Leprosy.
- Malaria.
- Measles.
- Mumps.
- Pellagra.
- Plague.
- Rabies.
- Scarlet fever.
- Septic sore throat.
- Smallpox.
- Tetanus.
- Trichinosis.
- Tuberculosis (all forms).
- Typhoid fever.
- Typhus fever.
- Whooping cough.
- Yellow fever.

Cases of the above diseases must be reported by the local board of health, *with the names and addresses of the patients*, to the State Department of Health within twenty-four hours.

DIPHTHERIA IN WATERTOWN.

Between September 21 and 26, 8 cases of diphtheria were reported by the board of health of Watertown, all of which were located in the vicinity of the Francis School. These 8 cases occurred in 6 families. Five of the cases attended the Francis School, 4 of them being in the same room. Of the 3 cases not in the school, a definite history of contact with the school cases could be traced. The Francis School was closed for a week and fumigated, and several churches, where some of the children ill with the disease attended Sunday school, were likewise fumigated.

TYPHOID FEVER IN MANSFIELD.

During the month of September, 9 cases of typhoid fever were reported to the board of health of Mansfield, and at the end of the month there were about 14 more cases in whom no definite diagnosis was made, but who were suspected of having typhoid. An investigation showed that all those ill with typhoid, as well as those suspected of having the disease, were supplied with milk by dealer X. No other cases have appeared on any other milk supply. An examination of the farms from which X obtained his milk did not reveal any source of infection. The conditions of the milk room of X, however, and the lack of facilities for the proper sterilization of the milk bottles and utensils, were such that if an infection occurred in any part of the supply it could easily be distributed by means of the milk bottles and cans.

The attention of the local board of health was called to the fact that the washing facilities of the X milk room were entirely inadequate, and recommendations were made that immediate steps be taken to provide facilities for the steam sterilization of the milk bottles, cans and of other milk-room utensils.

THE CONTROL OF OPHTHALMIA NEONATORUM.

Definition. — Ophthalmia neonatorum, or inflammation of the eyes of the new-born, includes all the inflammatory conditions of the conjunctiva that occur shortly after birth, usually before the end of the first month. Although in the majority of instances severe conjunctivitis of the new-born is of gonorrheal origin, such is not necessarily the case. The inflammation may be due to any of a number of different micro-organisms, and even when not of gonorrheal origin may cause serious results.

Sources of Infection. — Infection of the eyes, in the vast majority of instances, occurs during the process of birth, and is due to previous infection of the parturient canal of the mother. Infection subsequent to birth, however, is possible.

The Problem. — The prevention of the disastrous results often resulting from ophthalmia neonatorum must begin, necessarily, with the consideration of the health of the parents. Many family physicians will know in advance the possible complications which may arise at the births of the children, and will, therefore, be prepared to care for the babies' eyes immediately after birth, and use such prophylactic measures as have proved of value in the prevention of the inflammation of the eyes. Disease in parents is, however, oftentimes concealed or difficult of diagnosis, so that physicians must consider whether an adequate system of prophylaxis shall require that all children, irrespective of family history, are to be regarded as possibly exposed to the infection. Experience in lying-in hospitals has shown that the universal use of prophylactics has, in these institutions, practically stamped out this disease.

In order to prevent the disastrous results which often follow the infection of the eyes of the new-born, there must be active co-operation on the part of the attending physician, the local board of health and the State health authorities, each one having its own special duties in the matter.

The Duties of the Attending Physician. — 1. The physician should use the prophylactic at the birth of the child. It is to be used as follows: after washing the lids and adjacent tissues, drop into each eye of every new-born baby, immediately after birth, a single drop of a 1 per cent. solution of nitrate of silver. This solution, in a dropper-container, may be obtained, free of charge, from the State Department of Health, through the local board of health or its agent. In place of the nitrate of silver solution a few drops of a 25 per cent. solution of argyrol, or a 5 per cent. solution of protargol, may be used, but a solution of these latter preparations must be freshly prepared, whereas the nitrate of silver solution holds its strength quite permanently. It is not necessary to wash any of these solutions from the eyes, as they are practically non-irritating. Care should be taken that the end of the dropper does not touch the eye ball and that the finger nails do not come in contact with the cornea.

2. Before leaving a confinement case the physician should instruct the nurse, or some member of the family, to notify him *at once* if the

baby's eyes become sore, inflamed or discharge matter.[1] During the entire period of attending the mother the physician should, at every visit, examine the eyes of the child.

3. The physician attending the mother, or one called to a case of inflammation in the eyes of the new-born, must notify the local board of health immediately.[2]

4. Some physicians still make a distinction between conjunctivitis and ophthalmia neonatorum, assuming that the latter is of gonorrheal origin. Reports are often delayed until the condition becomes severe, or pending bacteriological examination. Such delays have frequently been disastrous. It is impossible, in the early stages of the disease, to distinguish those cases which are of little consequence from those which will, within a short time, be so severe as to make it impossible to save the child's eyesight. Physicians should, therefore, report all inflammations of the eyes of the new-born, no matter how mild in character.

5. Some physicians are in the habit of discharging obstetrical cases within a few days after delivery. The child is thus left to the mercy of ignorant or careless persons who may fail to take notice of any inflammation of the child's eyes, and who may not call a physician until the case is so far advanced that blindness cannot be prevented. In order to insure supervision over the child pending the danger period, physicians should notify the local board of health of any obstetrical case that they discharge within two weeks after delivery.

6. It is extremely desirable that all cases of ophthalmia neonatorum that cannot be cared for adequately at home, be transferred at once to the Massachusetts Charitable Eye and Ear Infirmary, or some similar institution or specially equipped hospital. This is advisable, not only for the good of the child, but for the safety of other members of the family as well, for the fact must not be lost sight of that the

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[1] The law requiring householders to report to local boards of health cases of inflammation of the eyes of the new-born infants reads in part as follows: "Should one or both eyes of an infant become inflamed, swollen and red, and show an unnatural discharge at any time within two weeks after its birth, it shall be the duty of the nurse, relative or other attendant having charge of such infant to report in writing within six hours thereafter, to the board of health of the city or town in which the parents of the infant reside, the fact that such inflammation, swelling and redness of the eyes and unnatural discharge exist. On receipt of such report, or of notice of the same symptoms given by a physician as provided by the following section, the board of health shall take such immediate action as it may deem necessary, including, so far as may be possible, consultation with an oculist and the employment of a trained nurse, in order that blindness may be prevented. Whoever violates the provisions of this section shall be punished by a fine of not more than one hundred dollars." (Section 49, R. L. 75.)

[2] Following are the provisions of chapter 75 of the Revised Massachusetts Laws: "SECTION 50. If a physician knows that a person whom he is called to visit is infected with smallpox, diphtheria, scarlet fever or any other disease declared by the state board of health to be dangerous to the public health, *or if one or both eyes of an infant whom or whose mother he is called to visit become inflamed, swollen and red, and show an unnatural discharge within two weeks after the birth of such infant, he shall immediately give notice thereof in writing over his own signature to the selectmen or board of health of the town; and if he refuses or neglects to give such notice, he shall forfeit not less than fifty nor more than two hundred dollars for each offence.*"

disease is very contagious, and that if the eyes of an adult or older child become infected it means an inflammation of even greater seriousness than that of the eyes of the new-born babe.

7. If circumstances make it necessary that a child be treated at home, the serious and contagious nature of the disease should be impressed upon the family. The baby should be separated from other children. Those having the care of the child should be instructed to wash their hands frequently and not to bring them in contact with their eyes. All bits of cotton used about the baby's eyes should be burned. Towels and all that may come in contact with the discharge should be carefully separated and thoroughly boiled.

The Duties of the Local Board of Health. — 1. On being notified of the existence of a case of ophthalmia neonatorum, the local board of health must notify the State Department of Health of such a case within twenty-four hours.[1]

2. It is customary for boards of health in the interest of efficiency, although not required to do so by law, to notify the State physicians of all cases of inflammation of the eyes reported to them. Double postal cards, one addressed to the State Department of Health and one to the State physicians, are provided for that purpose.

3. When a case of inflammation of the eyes of the new-born is reported to a local board of health, an immediate investigation of the case should be made by an agent of the board. If on investigation it is found that the case cannot be given proper treatment at home, every effort should be made to have it admitted to the Massachusetts Charitable Eye and Ear Infirmary in Boston, or some other similar institution or specially equipped hospital. If, for any reason, the case cannot be so removed, it should be kept under constant observation by the attending physician in consultation with an oculist assisted by a trained nurse, in order that no measures may be omitted looking to the prevention of permanent damage to the eyes.

4. Boards of health should request physicians practicing in their community to report to them any obstetrical cases which they discharge within two weeks from the birth of the child. Upon receiving such a report the local board of health should, through its physician, nurse or other agent, assume supervision of the case until the child is at least two weeks old. If such supervision on the part of the local board of health is not possible, a special letter should be sent to the

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[1] Following are the provisions of section 52 of chapter 75 of the Revised Laws: "If the board of health of a city or town has had notice of a case of smallpox, diphtheria, scarlet fever or of any other disease declared by the state board of health to be dangerous to the public health therein, it shall within twenty-four hours thereafter give notice thereof to the state board of health, stating the name and the location of the patient so afflicted, and the secretary thereof shall forthwith transmit a copy of such notice to the state board of charity."

family from its office, calling attention to the importance of watching the baby's eyes and of calling in a physician immediately on the slightest signs of redness, swelling or discharge from the eyes.

5. In order to inaugurate a campaign of education among mothers concerning the dangers of this and other infantile affections, the local board of health should send to the mother of every new-born babe a circular concerning the care of infants. A circular entitled "For Mothers with Little Babies" may be obtained by local boards of health from the State Department of Health.

Duties of the State Department of Health. — On notification of a case of inflammation of the eyes of the new-born to the State Department of Health or its representative, the State physician of the district, it will be investigated immediately by said physician, who will co-operate with the local board of health, the attending physician, and the family in formulating plans for the cure of the infection in the baby, and for the prevention of its spread to other individuals in the household. He will, furthermore, make a detailed report concerning the case and its outcome to the State Department of Health.

Conclusions. — A campaign has been carried out during the past three years by the State and local boards of health, in co-operation with the Massachusetts Commission for the Blind, with the result that in this short period of time the percentage of blindness due to ophthalmia neonatorum has been reduced in the State of Massachusetts at least 50 per cent. With the sympathetic action of the agencies concerned, and with the extension of the campaign along the lines indicated above, there is no doubt that this percentage can be still further cut down within the next few years.

LABORATORY EXAMINATIONS OF FOODS AND DRUGS.

The following tables present the results of the laboratory examinations of samples of food and drugs collected during the month of September, 1914: —

The cities and towns in which samples were collected were: Acton, Arlington, Attleborough, Bedford, Billerica, Boston, Brockton, Carlisle, Chatham, Chelmsford, Chelsea, Chicopee, Dedham, Deerfield, Dracut, Easthampton, Fitchburg, Gloucester, Harwich, Haverhill, Holyoke, Hull, Ipswich, Lawrence, Lexington, Lowell, Ludlow, Malden, Marblehead, Medford, Medway, Millis, Milton, New Bedford, Northampton, Plymouth, Rockport, Salem, Salisbury, Sandwich, Springfield, Stoneham, Stoughton, Wakefield, Waltham, Watertown, Westford, Woburn.

Summary of Analyses.

ARTICLES EXAMINED.	Number found to be of Good Quality.	Number adulterated or varying from the Legal Standard.	Total.
Canned fish,	1	–	1
Confectionery,	2	–	2
Cream,	33	10	43
Cream of tartar,	3	–	3
Drugs,	70	13	83
Eggs,	4	4	8
Ice cream,	9	–	9
Jam,	3	–	3
Milk,	405	215	620
Sausages,	4	–	4
Salad dressing,	2	–	2
Shrimp,	2	2	4
Totals,	538	244	782

PROSECUTIONS FOR VIOLATIONS OF THE LAW RELATING TO FOOD AND DRUGS.

Twenty-four convictions were secured during the month of September, 1914, for selling adulterated food and drugs, as follows: —

No.	NAME OF DEFENDANT.	Place.	Character of Article sold.
1	Edgar S. Delapenha,	Boston,	Cocoa (50 per cent. cane sugar).[1]
2	Alexander Kafengis,	Boston,	Ice cream (3.40 per cent. fat).
3	Mary C. Hazelwood,	Springfield,	Maple sugar (67 per cent. cane sugar).
4	Arakeli Arakellien,	Billerica,	Milk (total solids, 11.80).[2]
5	Leonard N. Doane,	Chatham,	Milk (total solids, 10.04).[2]
6	John P. Eaton,	Chelmsford,	Milk (total solids, 10.60).[2]
7	Jacob Frankel,	New Bedford,	Milk (total solids, 10.80).
8	H. P. Hood and Sons,	Marblehead,	Milk (total solids, 12.00).[1]
9	Meyer London,	New Bedford,	Milk (total solids, 11.20).
10	Charles Marshall,	Canton,	Milk (total solids, 10.72).[2]
11	Frank Masteria, Jr.,	New Bedford,	Milk (total solids, 11.40).[2]
12	Kirkor Mickeal,	Billerica,	Milk (total solids, 10.50).[2]
13	Alexander Ogonowski,	Dracut,	Milk (total solids, 9.30).
14	Louis Ouillette,	Freetown,	Milk (total solids, 11.96).[2]
15	Joseph Palme,	New Bedford,	Milk (total solids, 10.76).
16	Randall Bros.,	Agawam,	Milk (total solids, 10.52).[3]
17	Jeremiah Sheerin,	Chelmsford,	Milk (total solids, 10.10).[2]
18	Fred L. Tucker,	Chelmsford,	Milk (total solids, 10.00).[2]
19	Homenea A. Voghal,	New Bedford,	Milk (total solids, 11.62).
20	Walter C. Wheeler,	Marblehead,	Milk (total solids, 9.91).[2]
21	Irvin R. Barker,	Springfield,	Spirit of anise (not U. S. P.).
22	Neil Blanc,	Springfield,	Spirit of nitrous ether (not U. S. P.).
23	Alexander Cunningham,	Springfield,	Spirit of nitrous ether (not U. S. P.).
24	Abraham Weiner,	Boston,	Spirit of peppermint (not U. S. P.).[1]

[1] Appealed. [2] Watered. [3] Skimmed.

Fines imposed, $780.

SAMPLES OF FOOD WHICH UPON EXAMINATION WERE FOUND TO BE ADULTERATED.

Eggs.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
8271–S	New York Egg and Fruit Company, Boston.	
8273–S	New York Egg and Fruit Company, Boston.	

Shrimp.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
8177–S	Boston & New York Fish Company, Boston.	
8179–S	Sidewalk Stand, corner North and Richmond streets, Boston.	

SAMPLES OF DRUGS WHICH UPON EXAMINATION WERE FOUND TO BE ADULTERATED.

Alcohol.

Number of Sample.	DEALER.	Wholesaler or Manufacturer.	Per Cent. of required Strength.
9636–R	John W. O'Neil, Chicopee,	– –	73
9436–R	West End Family Package Store, Chicopee,	– –	58

Spirit of Anise.

Number of Sample.	DEALER.	Wholesaler or Manufacturer.	Per Cent. of required Strength.
9374–R	Irvin R. Barker, Springfield,	– –	70
9638–R	Irvin R. Barker, Springfield,	– –	62
9332–R	A. F. Brown, Norwood,	– –	66
9330–R	Clark's Pharmacy, Norwood,	– –	89

Spirit of Nitrous Ether.

Number of Sample.	DEALER.	Wholesaler or Manufacturer.	Per Cent. of required Strength.
9334–R	A. F. Brown, Norwood,	– –	76
8153–S	R. G. Coffin & Co., Nantucket,	– –	67
8161–S	Cottage City Drug Store, Oak Bluffs,	– –	28
8159–S	Herald Drug Store, Oak Bluffs,	– –	44

Spirit of Peppermint.

Number of Sample.	DEALER.	Wholesaler or Manufacturer.	Per Cent. of required Strength.
25604	E. L. Niquette & Co., Northampton,	– –	66

Spirit of Wintergreen.

Number of Sample.	DEALER.	Wholesaler or Manufacturer.	Per Cent. of required Strength.
25505	Co-operative Store, Lowell,	Williams & Carlton Company, Hartford, Conn.,	22½

Tincture of Iodine.

Number of Sample.	DEALER.	Wholesaler or Manufacturer.	Per Cent. of required Strength.
8175–S	The Cooper Drug Store, Plymouth,	– –	78

SAMPLES OF MILK AND CREAM WHICH UPON EXAMINATION WERE FOUND TO BE ADULTERATED.

Number of Sample.	Name of Dealer, Wholesaler or Producer.	Results of Analyses.
9640-R	Max Antes, Conway, ...	Total solids, 11.01 per cent.; fat, 3.60 per cent.; contained added water.
9642-R	Max Antes, Conway, ...	Total solids, 10.66 per cent.; fat, 3.30 per cent.; contained added water.
9644-R	Max Antes, Conway, ...	Total solids, 11.20 per cent.; fat, 3.60 per cent.; contained added water.
9646-R	Max Antes, Conway, ...	Total solids, 11.26 per cent.; fat, 3.60 per cent.; contained added water.
9648-R	Max Antes, Conway, ...	Total solids, 11 per cent.; fat, 3.60 per cent.; contained added water.
9650-R	Max Antes, Conway, ...	Total solids, 11.40 per cent.; fat, 3.50 per cent.; contained added water.
9652-R	Max Antes, Conway, ...	Total solids, 11.93 per cent.; fat, 3.50 per cent.; contained added water.
9654-R	Max Antes, Conway, ...	Total solids, 11.50 per cent.; fat, 3.60 per cent.; contained added water.
9656-R	Max Antes, Conway, ...	Total solids, 11.50 per cent.; fat, 3.60 per cent.; contained added water.
9658-R	Max Antes, Conway, ...	Total solids, 11.56 per cent.; fat, 3.80 per cent.; contained added water.
9660-R	Max Antes, Conway, ...	Total solids, 10.94 per cent.; fat, 3.30 per cent.; contained added water.
9662-R	Max Antes, Conway, ...	Total solids, 11.52 per cent.; fat, 3.50 per cent.; contained added water.
9680-R	Max Antes, Conway, ...	Total solids, 11.64 per cent.; fat, 3.90 per cent.; contained added water.
q 14535	Theron E. Batchelder, Danvers, . .	Total solids, 11.40 per cent.; fat, 2.60 per cent.; proteins, 2.94 per cent.; skimmed milk.
25586	Alexander Ogonowski, Dracut, . .	Total solids, 9.30 per cent.; fat, 2.80 per cent.; contained added water.
25587	Alexander Ogonowski, Dracut, . .	Total solids, 11.86 per cent.; fat, 4 per cent.; contained added water.
25588	Alexander Ogonowski, Dracut, . .	Total solids, 9.88 per cent.; fat, 2.70 per cent.; contained added water.
25589	Alexander Ogonowski, Dracut, . .	Total solids, 10.14 per cent.; fat, 3.30 per cent.; contained added water.
9530-R	Henry P. Boyce, Stoneham, . . .	Total solids, 10.38 per cent.; fat, 1.55 per cent.; proteins, 3.23 per cent.; skimmed milk.
8235-S	John P. Eaton, Chelmsford, . . .	Total solids, 10.60 per cent.; fat, 2.90 per cent.; contained added water.
8359-S	Harry Wm. Essex, Billerica, . . .	Total solids, 12.16 per cent.; fat, 3 per cent.; proteins, 3.32 per cent.; skimmed milk.
25568	F. J. Joyce, Waltham, ...	Total solids, 10.84 per cent.; fat, 3.20 per cent.; contained added water.
25569	F. J. Joyce, Waltham, ...	Total solids, 10.88 per cent.; fat, 3.20 per cent.; contained added water.
9764-R	Michael Kochaneck, Ludlow, . . .	Total solids, 10.60 per cent.; fat, 3.40 per cent.; contained added water.
9766-R	Michael Kochaneck, Ludlow, . . .	Total solids, 10.28 per cent.; fat, 3.10 per cent.; contained added water.
9768-R	Michael Kochaneck, Ludlow, . . .	Total solids, 10.60 per cent.; fat, 3.30 per cent.; contained added water.
9770-R	Michael Kochaneck, Ludlow, . . .	Total solids, 10.41 per cent.; fat, 3.40 per cent.; contained added water.
9772-R	Michael Kochaneck, Ludlow, . . .	Total solids, 10.59 per cent.; fat, 3.40 per cent.; contained added water.
9774-R	Michael Kochaneck, Ludlow, . . .	Total solids, 10.12 per cent.; fat, 3.20 per cent.; contained added water.
9776-R	Michael Kochaneck, Ludlow, . . .	Total solids, 10.46 per cent.; fat, 3.60 per cent.; contained added water.
9778-R	Michael Kochaneck, Ludlow, . . .	Total solids, 10 per cent.; fat, 2.60 per cent.; contained added water.
9780-R	Michael Kochaneck, Ludlow, . . .	Total solids, 9.60 per cent.; fat, 2.70 per cent.; contained added water.
9782-R	Michael Kochaneck, Ludlow, . . .	Total solids, 9.82 per cent.; fat, 2.80 per cent.; contained added water.
9786-R	Michael Kochaneck, Ludlow, . . .	Total solids, 10.08 per cent.; fat, 2.80 per cent.; contained added water.

SAMPLES OF MILK AND CREAM WHICH UPON EXAMINATION WERE FOUND TO BE ADULTERATED — *Concluded.*

Number of Sample.	Name of Dealer, Wholesaler or Producer.	Results of Analyses.
9788-R	Michael Kochaneck, Ludlow, . . .	Total solids, 10.13 per cent.; fat, 3.50 per cent.; contained added water.
9598-R	Pearson and Spear, Wakefield, . .	Cream: fat, 33 per cent.; contained added water.
25656	J. Pettit, Attleborough, ...	Total solids, 12.30 per cent.; fat, 3.70 per cent.; contained formaldehyde.
8383-S	Lewis W. Richardson, Boxborough, .	Total solids, 11.40 per cent.; fat, 2.60 per cent.; proteins, 3.05 per cent.; skimmed milk.
8385-S	Lewis W. Richardson, Boxborough, .	Total solids, 11.28 per cent.; fat, 2.30 per cent.; proteins, 3.12 per cent.; skimmed milk.
8387-S	Lewis W. Richardson, Boxborough, .	Total solids, 11.40 per cent.; fat, 2.30 per cent.; proteins, 3.05 per cent.; skimmed milk.
q 14533	Adam Robson, Salem, ...	Total solids, 12.08 per cent.; fat, 2.60 per cent.; proteins, 3.59 per cent.; skimmed milk.
9736-R	George H. Schaffner, Waltham, . .	Total solids, 10.36 per cent.; fat, 2.90 per cent.; contained added water.
9738-R	George H. Schaffner, Waltham, . .	Total solids, 10.56 per cent.; fat, 3 per cent.; contained added water.
9426-R	Tait Brothers, Springfield, . . .	Cream: fat, 42.90 per cent.; contained added water.
25513	Cyrus C. Udell, Dracut, . . .	Total solids, 10.50 per cent.; fat, 2.95 per cent.; contained added water.
25514	Cyrus C. Udell, Dracut, . . .	Total solids, 9.92 per cent.; fat, 2.40 per cent.; contained added water.
25515	Cyrus C. Udell, Dracut, . . .	Total solids, 11.52 per cent.; fat, 3.50 per cent.; contained added water.
25516	Cyrus C. Udell, Dracut, . . .	Total solids, 10.12 per cent.; fat, 2.50 per cent.; contained added water.

COLD STORAGE OF FOOD.

During the month of September, 1914, the cold-storage warehouses were visited frequently, and found to be in good sanitary condition. The following table shows articles in cold storage condemned on physical examination as unfit for food: —

Date.	ARTICLES.	Weight (Pounds).	Reasons.	Disposition.
Sept. 8, 1914	Lamb fores, . .	70	Tainted, . .	Rendered.
Sept. 15, 1914	Beef trimmings, .	412	Tainted, . .	Rendered.
Sept. 22, 1914	Mackerel, . .	573	Decomposed, . .	Buried at sea.
Total, .	. . . .	1,055		

SLAUGHTERING AND MEAT INSPECTION.

During the month of September, 1914, convictions were secured against the following persons, either because the inspector was not present at the time of slaughter, or, on account of slaughtering without a license: —

No.	Date.	Name of Defendant.	Place.	Result.
1	Sept. 15, 1914	Frank Vera,	Dartmouth,	Fined.
2	Sept. 17, 1914	Jason Waterman,	Rehoboth,	Fined.
3	Sept. 22, 1914	Louis Spellman,	Dartmouth,	Fined.

Total amount of fines imposed, $55.

The license of Jason Waterman was revoked in accordance with paragraph 15 of the slaughtering laws of Massachusetts.

In addition to the above, Charles W. Howland, an inspector of slaughtering in the town of Dartmouth, was found guilty for not complying with the orders and regulations of the State Department of Health, in accordance with section 16, chapter 90, Revised Laws, as amended by chapter 534 of the Acts of 1911. Fined $20.

On Sept. 11, 1914, the carcass of a calf weighing but 30 pounds was condemned at the slaughterhouse of John Fuller, Granby, Mass., and was disposed of as food for chickens.

REPORT ON INSPECTION OF DAIRIES.

During the month of September, 1914, 208 dairies were examined in the following places: —

Place.	Number examined.	Class AA.	Class A.	Class B.	Unclean Dairies.	Per Cent. Clean Dairies.
Abington,	16	–	–	5	11	31.25
Bridgewater,	18	–	–	15	3	83.33
East Bridgewater,	28	–	5	9	14	50.00
Fairhaven,	39	–	1	3	35	10.26
Freetown,	4	–	–	2	2	50.00
Norwell,	4	–	–	2	2	50.00
Randolph,	1	–	–	–	1	–
Rehoboth,	35	–	2	4	29	17.14
Rochester,	10	–	–	3	7	30.00
Seekonk,	20	–	2	2	16	20.00
West Bridgewater,	32	–	–	7	25	21.88
Whitman,	1	–	–	1	–	100.00

Total number of dairies examined,	208
Total number of commendable dairies,	63
Total number of unclean dairies,	145
Percentage of dairies which passed inspection,	30.29

In addition to the above, 66 dairies were visited at which the sale of milk had been discontinued, 1 of which is making cheese; also, 41 dairies were reported as producing less than 20 quarts of milk a day.

Included in the total number of dairies visited were 72 which had recently started in the milk-producing business and were inspected for the first time.

The names of the owners of the dairies found to be worthy of commendation follow: —

ABINGTON.

Class B.

	Per Cent.		Per Cent.
Cushing, Charles E.,	69¼	Turfant, P. P.,	60½
Ford, Albee A.,	62½	Turner, George,	63¾
Kiley, Cornelius,	60		

BRIDGEWATER.

Class B.

Alcott, George J.,	60	Helmes, Charles F.,	74½
Ames, Fisher,	73	Johnson, George L.,	65
Burrill, Charles,	60	Keith, Benjamin,	64½
Butterfield, Homer L.,	65½	Leach, Philo,	60
Chuckran, Samuel,	61½	McFarland, Alvah H.,	61½
Conant, Andrew,	66½	Murray, James,	66
Cook, Charles M.,	68	Oliver, James,	66½
Cushman, E. H., Estate,	60		

EAST BRIDGEWATER.

Class A.

Clarke, Charles H.,	75	Marchant, G. M.,	76¼
Harlow & Leland,	83¾	Mitchell, C. B.,	75
Leach, C. W., & Son,	78¼		

Class B.

Dent, M. C.,	65½	Lindskog, Olaf,	70
Gilman, Israel,	67¼	Morehouse, Daniel,	60
Glover, W. F.,	63¾	Seymour, R. W.,	69½
Holster, Peter A.,	64½	Willis, Galen,	66½
Jenkins, Z. A.,	62½		

FAIRHAVEN.

Class A.

	Per Cent.
Dana, (Mrs.) E. A.,	81½

Class B.

Blossom, L. F.,	66	Mello, Angelo,	61½
Dugdale, Richard,	60¼		

FREETOWN.

Class B.

	Per Cent.		Per Cent.
Mastera, Frank J.,	64	Richards, Eli,	64¾

NORWELL.

Class B.

Osborn, John F.,	60	Lyons, Percy E., & C. W.,	69

REHOBOTH.

Class A.

Baker, George F.,	79¾	Bliss, Francis A., & Son,	81¾

Class B.

Carpenter, George W.,	60	Holden, George W.,	60¼
DeSilva, Sarino,	62	Horton, F. H.,	60

ROCHESTER.

Class B.

Chartier, Ludger,	60¼	Paquette, Servule,	60¾
Humphrey, Lawrence,	67¾		

SEEKONK.

Class A.

Hopkins, F. W.,	79	Stone, Solomon,	78

Class B.

Cole, Lowell M.,	60¾	Driscoll, S. F.,	65

WEST BRIDGEWATER.

Class B.

Cheney, F. A.,	66¼	Peterson, Gustave A.,	62½
Copeland Brothers,	67¼	Winberg, August,	67¾
Copeland, Samuel G.,	62½	Wood, Alexander H.,	60
Manley, Albert,	72¼		

WHITMAN.

Class B.

	Per Cent.
Paige, B. F.,	70

CLASSIFICATION OF DAIRIES.

AA = 90 to 100 per cent.
A = 75 to 90 per cent.
B = 60 to 75 per cent.
Below Class B (60 per cent.), unclean or dirty.

RETURNS OF DISEASES.

Cases of Diseases declared by the State Department of Health to be Dangerous to the Public Health.

[Under the provisions of section 52 of chapter 75 of the Revised Laws.]

DISEASE.	Week ending —				
	Sept. 5.	Sept. 12.	Sept. 19.	Sept. 26.	Total.
Diphtheria,	87	92	95	177	451
Scarlet fever,	46	56	80	95	277
Typhoid fever,	66	97	93	97	353
Tuberculosis, pulmonary (or not classified),	137	109	138	125	509
Tuberculous meningitis,	4	2	2	2	10
Tuberculosis, other forms,	8	3	2	6	19
Measles,	31	30	26	34	121
Varicella,	5	13	6	13	37
Whooping cough,	25	23	34	46	128
Ophthalmia neonatorum,	54	44	46	51	195
Anterior poliomyelitis,	3	7	6	8	24
Cerebro-spinal meningitis,	1	2	2	–	5
Rabies,	–	–	4	–	4
Smallpox,	–	–	1	–	1
Trachoma,	1	2	1	1	5
Typhus fever,	–	1	–	–	1
German measles,	–	–	1	1	2
Trichinosis,	–	–	–	1	1

RETURNS OF DEATHS.

Deaths from Diseases declared by the State Department of Health to be Dangerous to the Public Health.

[Under the provisions of chapter 210, Acts of 1913.]

DISEASE.	Week ending —				
	Sept. 5.	Sept. 12.	Sept. 19.	Sept. 26.	Total.
Diphtheria,	5	6	4	6	21
Scarlet fever,	–	–	1	2	3
Typhoid fever,	6	5	7	7	25
Tuberculosis, pulmonary,	47	40	46[1]	39[1]	172
Tuberculous meningitis,	5	1	4	1	11
Tuberculosis, other forms,	3	7	8	6	24
Measles,	3	1	–	–	4
Whooping cough,	2	4	2	1	9
Anterior poliomyelitis,	–	2	1	2	5
Cerebro-spinal meningitis,	2	3	1	1	7
Rabies,	–	–	1	–	1
Tetanus,	–	–	1	–	1
Typhus fever,	–	1	–	–	1
Glanders,	–	–	–	1	1

[1] One nonresident.

THE EARLY DIAGNOSIS OF LEAD POISONING.[1]

Harry Linenthal, M.D., Assistant Physician to Outpatients, Massachusetts General Hospital;
State Inspector of Health, Boston.

The subject of occupational diseases has of late been attracting considerable interest. We are coming to a realization that diseases caused by industrial poisons or conditions under which industries are carried on have a marked influence on the morbidity and mortality of the community. What is of still greater importance, we recognize that such diseases are, at least in a very large measure, preventable. Since 1911 14 states of the Union have enacted laws requiring physicians to report to designated State authorities occupational diseases which they are called on to treat. The lists of these occupational diseases in the various States are not uniform, but most of them contain such conditions as poisoning from lead, brass, phosphorus, arsenic or mercury or their compounds, or from wood alcohol, anthrax or compressed-air illness.

In view of the fact that physicians of many States are now required to report the above-named occupational diseases, it is pertinent to inquire as to their early diagnosis. When can a diagnosis be made sufficiently definite to warrant the physician in reporting it to the proper authorities? Of all the diseases in the list none is of so common occurrence as is the poisoning due to lead or its salts, on account of the great variety of industries in which the metal or its salts are used. I therefore propose to consider the early diagnosis of plumbism the most common and by far the most serious in its effects on the health of the working population.

Lead-poisoning presents itself in a great variety of manifestations, and while the diagnosis in a well-marked case is usually not difficult, it may not be so clearly defined in the early stages of the intoxication. The tendency in such cases is not to make the diagnosis unless the objective signs are found which are supposed to be pathognomonic of the disease. This tendency to postpone the diagnosis in the absence of certain objective signs is dangerous and often does incalculable harm. The physician who fails to recognize tuberculosis, for instance, without the presence of tubercle bacilli in the sputum, very often fails to avail himself of the opportunity of arresting the disease in its incipiency. The same is true of lead-poisoning. The waiting for certain signs before establishing the diagnosis may permit the poison to undermine the constitution of the worker beyond any remedial measures. The objective signs supposed to be pathognomonic of lead-poisoning, the presence of one or more of which is still regarded by many physicians as absolutely necessary before a diagnosis can be made, are the lead line on the gums, basophilic degeneration of the red cells and the presence of lead in the urine and stools.

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[1] From the clinic of the West Medical Service, Massachusetts General Hospital. Reprinted from The Journal of the American Medical Association, June 6, 1914.

The technical difficulty of the last one is so great as to preclude it from being made a part of the routine examination in general practice. Moreover, the presence of lead in the excretions is not constant even in well-marked cases of lead poisoning. On the other hand, lead has often been found in the urine and more frequently in the stools of persons exposed to lead who do not show any evidence of intoxication.

Overemphasis on Lead-line and Basophilic Granules.

The presence of the lead-line, and basophilic degeneration of the red cells, are objective findings which are in practical use in the diagnosis of lead-poisoning. As a matter of fact, neither one of these signs is pathognomonic of the disease, and while their presence is a valuable aid in the diagnosis of obscure cases, their absence should not be given undue weight against the diagnosis of lead-poisoning, when a history of definite exposure to lead can be obtained.

Basophilic granules in the red cells may be found in severe secondary anemias in which hemolysis has taken place, and are, on the other hand, often absent in cases in which a positive diagnosis of lead-poisoning can be made. In looking over a large number of records in which a definite diagnosis of lead-poisoning was made in the outpatient department of the Massachusetts General Hospital, by the clinical symptoms and the presence of the lead-line, I found that in nearly 50 per cent., basophilic granules in the red cells were absent.

Sir Thomas Oliver, who has devoted a great deal of time to the study of lead-poisoning, states that in only few instances of the great number of examinations of the blood that he has made, in early as well as in late cases of plumbism, has he found the basophilic granules. Basophilic degeneration of the red cells, in short, does not possess the diagnostic value which some attribute to it, but can at most be regarded as an important confirmatory sign.

Still greater importance is attached to the presence of the lead-line.

In my investigation of some of the lead industries of Massachusetts several years ago, for the State Board of Health, I had occasion to confer with many physicians who, from time to time, treated patients engaged in these industries, and I frequently found that no matter how suggestive the symptoms complained of were of lead-poisoning, the diagnosis was not made because of the absence of the lead-line. As a matter of fact, the lead-line presents a great many anomalies, and irreparable harm will often be done when a diagnosis of plumbism is not made because of its absence. In the investigation referred to above, I have frequently seen well-marked lead-lines among workers exposed to lead who did not present, at the time of investigation or at any previous time, any signs of ill health. On the other hand, if one looks into the very extensive literature on the subject, one will find many cases of severe lead-poisoning reported in which lead has been definitely demonstrated in the urine and stools, and yet no vestige of a lead-line could be found. Moreover, the lead-line is extremely rare when the gums are in a healthy condition and when the teeth are well cared for. Dr. Oliver fed experimental animals with lead for a long time without observing any lead-line. If, however, an infection of the gums of such animals was produced, the lead-line appeared within a short time.

The distinction between lead absorption and lead poisoning is not, as a rule, clearly borne in mind. All persons working in lead, unless the most unusual precautions are taken, inhale or swallow some of the poison, but it is excreted through the kidneys and the intestinal tract. As long as the excretion corresponds to the absorption, no symptoms will manifest themselves. If, however, for some reason, the balance is destroyed and the excretion diminishes, lead will be stored up in the tissues and poisoning is the result. The presence of the lead-line simply means that the person has been absorbing lead, and is in itself of no greater weight in the diagnosis of lead-poisoning than is the fact that the patient's history shows that he is working in a lead process, in which we know that he inevitably absorbs lead. A careful inquiry into the nature of the industrial process in which the patient is engaged is therefore of the utmost importance. The history of exposure is the all-important factor in the diagnosis of plumbism.

In cases of non-industrial plumbism, however, in which no history of exposure can be obtained, the presence of the lead-line or of the basophilic granules is of inestimable value in the diagnosis, since it offers a clue for the explanation of certain symptoms which would otherwise be obscure.

The following case-reports, taken from the records of the Massachusetts General Hospital, will illustrate the reluctance, even among good clinicians, to make a diagnosis of plumbism in the absence of the lead-line, or stippling: —

Case 1. — A man of 36, a sheet-metal worker for eleven years, handles a great deal of lead in his work, complains of pains in the abdomen, loss of weight, weakness of extremities and attacks of diarrhœa followed by constipation. No lead-line.

Case 2. — A man of 34, a painter for ten years, complains of attacks of colic, headaches, obstinate constipation and general nervousness. No lead-line, no stippling.

Case 3. — A man of 22, a painter for four years, complains of constipation, attacks of severe abdominal pains and headaches. He looks pale; no lead-line, no stippling.

Case 4. — A painter of 22, who has worked at the trade for ten years, complains of obstinate constipation, pain in his joints, headaches, numbness and weakness of extremities; he is easily fatigued; no lead-line or stippling found.

Case 5. — A worker in a rubber factory for six years complains of abdominal pains, obstinate constipation, severe pains in lumbar region, loss of appetite, and general nervousness; no lead-line found.

Case 6. — A man of 49, a painter for twenty-five years, gives a history of lead-poisoning when he first started his work. He now complains of tremor and weakness of hands so that he frequently drops his brush while at work. He has attacks of abdominal pains, pains in his joints, and is pale. No lead-line or stippling found.

Case 7. — A man of 38, who worked in a car factory for fourteen years, and part of whose work consisted of mixing lead, complains of sharp pains in the abdomen, attacks of dizziness, fine tremor of hands, metallic taste in the mouth and pains in the extremities. He lost considerable weight. No lead-line or stippling found.

In none of the foregoing cases was a definite diagnosis of lead-poisoning made. There is no doubt, however, that if a lead-line was present in any of these cases, or if stippled red cells were found, even if the symptoms had been less characteristic, a positive diagnosis of plumbism would have been made. Yet the occupation of these patients was sufficient evidence that lead absorption was taking place, and the symptoms were sufficiently characteristic to warrant a definite diagnosis without the corroborative evidence of the lead-line or stippling.

In consequence of the undue weight which is given to the objective signs, persons who show themselves, by the symptoms of which they complain, susceptible to the influence of lead, are permitted to continue at their work without any additional precautions and without any warning as to the danger to which they are exposed. This is shown by the following illustrative case-reports, taken from the records of the outpatient department of the Massachusetts General Hospital. These patients attended the clinic for a long time, and no diagnosis of plumbism was made because of the absence of the lead-line or stippling. At some later date, however, although the symptoms were the same, the diagnosis of plumbism was made because of the appearance of one or more of the objective signs.

Case 8. — A worker in a rubber factory came to the clinic complaining of precordial pains, headaches, pains in the arms and attacks of abdominal pains. He had evidence of mitral regurgitation. There was no lead-line, and no diagnosis of lead-poisoning was made. He came again eight months later with the same symptoms but of increased severity. A lead-line was found present at this time, and a diagnosis of plumbism was made.

Case 9. — A painter of 23 came to the clinic, November, 1907, complaining of pain in the back, numbness and weakness of extremities, abdominal pains, headaches and nervousness; no lead-line was present, and no diagnosis was made. In 1912 he presented himself with the same symptoms. Lead-line and stippling were found and a diagnosis of lead-poisoning was made.

Case 10. — A painter presented himself at the clinic in July, 1907, complaining of constant severe pain in the upper abdomen, attacks of vomiting, pains in the knees and dizziness. A diagnosis of arteriosclerosis was made. In July, 1913, he presented himself again with the same symptoms. A lead-line and stippling were found. Diagnosis, lead-poisoning.

Case 11. — A machinist of 28 came to the clinic in 1906, complaining of attacks of severe abdominal pains, bad taste in the mouth, obstinate constipation, attacks of nausea and vomiting. He came many times during 1910 and again in 1911, complaining of the same symptom-complex. In December, 1911, a lead-line was found and many stippled cells. Diagnosis of lead-poisoning was made.

Case 12. — A worker in a rubber factory, aged 57, came in 1904 complaining of pain in the cardiac area and the right shoulder, pains in hips and legs, weakness of extremities, dizzy spells, easily tired and constipated, also wasting of extensor muscles. No lead-line was found (patient had false teeth). No diagnosis of lead-poisoning was made until 1905, when lead was found in the urine.

Case 13. — A carriage painter of 38 came in 1903 complaining of pains in the back between the shoulder-blades. There was no record of lead-line or stippling. No diagnosis was made. Later, in the same year, he came complaining of attacks of dull pain in the region of the umbilicus, and sharp pains in the lumbar region which kept him awake for two nights. A history of alcoholic excess was obtained for the last two weeks; no lead-line was found; diagnosis, alcoholism. In 1908 he came again, complaining of pains in his back and in his feet, general weakness and nervousness; no diagnosis was made. Several weeks later he came again complaining of the same symptoms. Lead-line was present at this time. Diagnosis of lead-poisoning was made.

The unwarranted delay so frequent in diagnosing plumbism even in the presence of a definite history of exposure to lead is well illustrated by the last case. For nearly five years this man had been presenting himself at various times at the hospital, complaining of a train of symptoms which, taken together with his work, should have made a diagnosis possible, and yet he was permitted, during all that time, to continue his work without any special precautions, until the lead-line appeared, when the diagnosis of lead-poisoning was made.

EARLY SYMPTOMS OF PLUMBISM.

It would of course be folly to attribute to lead all the ill health of lead-workers. The symptoms, therefore, have to be considered carefully before the responsibility of the diseased condition is laid to the industry. The symptoms of early plumbism are not well defined, yet there is a group of symptoms which, when not open to explanation on any other basis must, when a history of exposure to contact with lead has been obtained, be taken as evidence of early lead-poisoning. Indeed, it is important to inquire carefully as to any possible industrial exposure to lead whenever certain ill-defined states of ill health present themselves among workers, when such diagnoses, for instance, as anemia, debility, constipation, lumbago or chronic arthritis are made. Inquiries as to the details of the patient's work should be made, for unless the physician has a familiarity with the various industrial processes, the general designation of the patient's work may not indicate any exposure to lead.

Among the earliest manifestations of chronic lead-poisoning is the pallor of the skin, which is often out of all proportion to the actual anemia — that is, the reduced hemoglobin and red count. Associated with this pallor is a wasting of the subcutaneous fat first noticed in the infra-orbital region and about the buccinator muscles, producing a pinched appearance of the face. General muscular weakness with "rheumatic" pains in the joints, muscles and more particularly in the back, are of frequent occurrence in the early stages of the disease. Among the gastro-intestinal symptoms are anorexia, nausea, attacks of constipation, or constipation alternating with diarrhea. Loss of appetite, from whatever cause, among workers exposed to lead is always a symptom to be taken seriously, for, as has been pointed out by Legge, the absorption of lead is greatly increased when the stomach is empty. The most frequent gastro-intestinal symptom is the more or less characteristic colic generally referred to the lower abdomen, which comes in paroxysms, and may or not be associated with tenderness. General nervousness, persistent headaches and dull mentality are also among the earlier manifestations. These symptoms should always be regarded seriously when occurring in persons exposed to lead, for they may be the precursors to the more serious nerve-lesions, such as wrist-drop, encephalopathy and to the more insidious and less dramatic changes in the vascular and excretory systems, that of arteriosclerosis and chronic nephritis.

IMPORTANCE OF EARLY DIAGNOSIS OF OCCUPATIONAL DISEASES.

The laws enacted in many of the States requiring physicians to report to a central authority certain occupational diseases are measures in the interest of the public health. These diseases are preventable, and the duty of the central authority to whom the reports are made is, or should be, to investigate the cases as they are reported, trace the source of the poisoning, instruct the patients as to precautions, and undertake preventive measures against the occurrence of other cases.

In occupational diseases, as well as in communicable diseases, the most effective weapon in the prevention of their frequent occurrence, as well as in minimizing the serious consequences to the worker, leading to permanent injury to health and often terminating in death, is to discover these cases in their incipiency. This responsibility rests with the physician. He is in the vanguard in public health activity. It is through him that the public health authorities are made aware of the existence of preventable diseases, so that proper steps may be taken to detect and eradicate the dangerous spots which threaten the health and life of the community.

There is still another point of view which makes the recognition of occupational disease, whether it is due to lead or other industrial poisoning or conditions under which people are employed, of great importance. To remedy any social evil the first essential is to recognize its presence and its extent. It is only by a realization of the great amount of sickness and incapacity that is produced by occupational diseases that we can expect the proper remedial measures to be brought about. We have at present no available data of the extent of the well-defined specific occupational diseases, and still less adequate is our knowledge of the general effects of various industrial processes on the health of the workers. Our morbidity and mortality statistics, as far as their relation to occupation is concerned, are hopelessly inadequate.

The occupations recorded on hospital records are of little or no value as far as the study of the effects of occupation on health is concerned. The term "laborer," for instance, a designation assigned to a large proportion of the male outpatients, covers every conceivable kind of unskilled labor, and throws no light as to the nature of the work. The term "railroad worker" may mean a locomotive fireman, a gate-tender, or used, as in a recent case which came to my notice, to designate the work of a young woman who was folding railroad time-tables in a printing office.

A careful analysis and recording of the patient's work is essential not only for the diagnosis of the well-known occupational diseases, but also to extend our knowledge as to the effects of certain occupations on mortality and morbidity.

An intensive study in occupational diseases is now being carried on by Miss Susan Holton at the social service department of the Massachusetts General Hospital, under the direction of Dr. David L. Edsall. It is only by such intensive work that we may hope in time, by the accumulation of sufficient material, carefully investigated and recorded, to draw any inferences as to the effects of the various industrial processes on health.

Summary and Conclusions.

The reporting of occupational diseases is a public health measure. Early diagnosis of these diseases is essential both to protect the worker from the more serious effects of the industrial poisons and to gather information as to the prevalence of these diseases.

In the diagnosis of plumbism, the most frequent of occupational poisoning, there is in many quarters a tendency to give too much emphasis to the presence of the lead-line or basophilic degeneration of the red cells. While the presence of these signs is often of industrial origin, their absence should not prevent a great aid in the diagnosis of obscure cases of non-diagnosis when certain symptoms characteristic of early plumbism manifest themselves, more particularly when a history of exposure to contact with lead can be obtained.

The history of exposure is the all-important aid in the diagnosis, and careful inquiry should be made by the physician as to the details of the patient's work, and he should not be satisfied with a general designation which may not give any indication of exposure to lead.

DECISION OF THE SUPREME JUDICIAL COURT OF MASSACHUSETTS CONCERNING THE APPLICATION OF THE LAWS RELATIVE TO THE ADULTERATION OF FOOD.

COMMONWEALTH *v.* NEW ENGLAND MAPLE SYRUP COMPANY.

Middlesex. November 17, 1913 — May 19, 1914.

Present: RUGG, C.J., HAMMOND, LORING, BRALEY and DECOURCY, JJ.

Food, Adulteration.

If, at the trial of a complaint charging the sale of adulterated syrup in violation of R. L. c. 75, § 18, it appears that a certain person ordered of the defendant and the defendant sold to him "Golden Tree" syrup, which was a blend prepared by mixing maple sugar with water and adding granulated sugar and was of the same consistency as pure maple syrup and of the same color as one grade of maple syrup, that the price of the syrup sold was about half that of pure maple syrup; that upon the receptacle containing the syrup sold was a label with pictures of a maple tree and of sugar cane, and a statement declaring the syrup to be "made from granulated and maple sugars," the jury is not warranted in finding the defendant guilty, under clause 4 of the section, of selling syrup "in imitation of" or "under the name of" maple sugar syrup.

In clause 8 of R. L. c. 75, § 18, as amended by St. 1910, c. 528, § 1, declaring an article of food to be adulterated if "it contains any added antiseptic or preservative substance," excepting certain substances, among them cane sugar, and providing that the paragraph should "not be construed as permitting the use of cane sugar in maple syrup, maple sugar, honey, cocoa, or any other food product in which the presence of cane sugar as a preservative is unnecessary," the words, "in which the presence of cane sugar as a preservative is unnecessary," do not apply to any of the preceding words except "any other food product;" and therefore the mixing of cane sugar as a preservative in any of the other articles named is prohibited.

Complaint, received and sworn to on January 2, 1912, in the Police Court of Lowell, charging that the defendant sold to one Frank X. Dostaller "a certain article of food, to wit: syrup, said syrup so sold as aforesaid being then and there adulterated at the time of said sale within the meaning of" R. L. c. 75, § 18.

On appeal to the Superior Court, the case was tried before *Chase*, J., upon an agreed statement of facts which was substantially as follows: —

On Dec. 18, 1911, Frank X. Dostaller ordered from the defendant and shortly thereafter received three cases of "Golden Tree" syrup of different sizes. The label of each bottle of syrup set forth substantially the name, the legend in a trademark, "Golden Tree Best Quality," the words "Registered under Food & Drugs Act," and the statement, "Made from Granulated and Maple Sugars," with pictures of a maple tree and of sugar cane.

The Golden Tree syrup is a blend prepared by mixing maple sugar with water to produce a syrup, and then adding to it granulated sugar. The ingredients are well-known articles of food, wholesome, and not injurious to health, and no artificial coloring is used. The blend itself is not deleterious nor injurious to health.

The color of pure sap syrup or pure maple sugar varies from a very dark brown to an amber, the color of Golden Tree syrup. The taste varies from a sweet, pleasant one, like Golden Tree syrup, to a strong, displeasing one. Both syrups have the same consistency.

The retail price of the same quantity of pure sap syrup is double that of the Golden Tree syrup. The addition of the granulated cane sugar to the Golden Tree syrup tends to preserve the maple sugar syrup of the compound. The granulated cane sugar constitutes approximately two-thirds of the compound.

The judge refused to order a verdict for the defendant and the jury returned a verdict of guilty.

At the request of the defendant the judge reported the case for determination by this court, the verdict to stand if the refusal to order a verdict of not guilty was correct; and the verdict to be set aside and a verdict of not guilty to be ordered if the trial judge should have ordered such a verdict.

H. W. Beal, for the defendant.

N. P. Brown, Assistant District Attorney, for the Commonwealth.

Hammond, J. The charge against the defendant is that it sold to one Dostaller "a certain article of food, to wit: syrup, said syrup so sold as aforesaid being then and there adulterated at the time of said sale within the meaning of" R. L. c. 75, § 18. There is no question that a syrup was sold, and the only question is whether it was adulterated within the meaning of either the fourth or the eighth clause (as amended by St. 1910, c. 528) of that section.

1. As to the fourth clause. This clause declares food to be adulterated "if it is in imitation of or is sold under the name of another article." It is strongly argued by the Commonwealth that this Golden Tree syrup, consisting of a compound of maple sugar, granulated sugar and water, was "in imitation of" maple sugar syrup. But we think that the agreed statement of facts upon which the case was submitted to the jury fails to support beyond a reasonable doubt this contention. We see nothing in the labels upon the body of the bottle in which the syrup was placed, or upon the cork, calculated to show any attempt at such imitation; and the mere facts that the consistency of the two syrups was the same, and that the color of the compound was the same as one of the various colors of pure maple syrup are not enough.

Nor was the compound "sold under the name of another article."

Dostaller did not order pure maple sugar syrup, but "Golden Tree Syrup." He received what he ordered. No deception seems to have been practiced upon him. Plainly, the article ordered and delivered was the blend known as "Golden Tree Syrup," and it does not appear to have been known by any other name. So far as the prosecution rests upon this clause it fails.

2. As to the eighth clause (as amended by St. 1910, c. 528). This clause as originally enacted declared an article of food to be adulterated "if it contains any added antiseptic or preservative substance, except common table salt, saltpeter, cane sugar, alcohol, vinegar, spices, or, in smoked food, the natural products of the smoking process; but the provisions of this definition shall not apply to any such article if it bears a label on which the presence and the percentage of every antiseptic or preservative substance are clearly indicated." (R. L. c. 75, § 18, cl. 8.) This clause was amended by St. 1910, c. 528, by inserting after the words "smoking process" these words, to wit: "but this paragraph shall not be construed as permitting the use of cane sugar in maple syrup, maple sugar, honey, cocoa, or any other food product in which the presence of cane sugar as a preservative is unnecessary."

In the construction of this amendment the defendant contends that the words "in which the presence of cane sugar as a preservative is unnecessary" apply not only to "any other food product," but also to the articles of food immediately preceding, namely, "maple syrup," etc., and that it being conceded that cane sugar "tends to preserve" the maple sugar syrup of the "compound," the syrup sold is not an adulterated food under this section. But we cannot adopt that construction. We are of opinion that the words "in which the presence of cane sugar as a preservative is unnecessary" do not apply to anything except "any other food product," and that the effect of the amendment is to prohibit the mixture of cane sugar as a preservative with any of the articles immediately preceding. Under this interpretation of the amendment the article sold was an adulterated syrup and could be sold only in the manner prescribed in the clause.

It is suggested by the defendant that the Golden Tree syrup, although a blend, was of itself a well-known article and unit of food, but this is not made to appear in the agreed statement; and in this respect the case differs from *Adams* v. *New England Maple Syrup Co.*, 210 Mass. 475, where it appeared that the blend was a well-known article in the trade.

The defendant's request for a verdict of not guilty was rightly refused.

Under the terms of the report the conviction stands, and it is

So ordered.

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APPROVED BY
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PUBLIC HEALTH BULLETIN.

WM. C. HANSON, M.D., *Acting Commissioner of Health.*

TYPHOID FEVER IN WEYMOUTH.

From September 27 to October 26, 19 cases of typhoid fever were reported to the board of health of Weymouth. An investigation of the cases showed that all were taken sick the latter part of September. Cases reported later were those in which the diagnosis was delayed. An investigation made immediately upon the report of the first cases showed that they were all on one milk supply, and suspicion was directed to that supply as the source of the infection. This suspicion was later confirmed by the fact that all cases reported subsequently were on the same supply. An investigation of the milk farm, although not revealing the source of the infection, showed conditions incompatible with the safe handling of milk. In accordance with suggestions made to the local board of health, a new milk room was constructed and provided with facilities for the proper washing and sterilization of all milk utensils. All the milk is pasteurized now in the individual containers.

TYPHOID FEVER IN LEOMINSTER.

Twelve cases of typhoid fever were reported to the board of health of Leominster between Oct. 6 and Oct. 31, 1914. All of the cases were confined to the French district of the city, 5 being inmates of the French convent. The remaining 7 cases were in 5 families, and were taken sick within a few days of each other. They suggested a common source of infection, an investigation of the milk supply showing that all the cases took their supply either entirely or in part from milk dealer A. Suspicion was therefore directed to that supply as the source of the infection. An examination of the premises of A and of all the people who handled the milk revealed the fact that a son of A, who had been in Montreal during the summer, had returned on September 12. He gave a history of having been ill for five or six weeks prior to his coming home. Two positive Widals were obtained from his blood. Although bile cultures from his stools were negative, it is highly probable from the positive Widal that his recent illness was typhoid fever and that he was the source of the infection. Recommendations were made to the local board of health to prohibit this suspect from coming in contact with the milk supply, and to have a thorough sterilization of all milk utensils. These measures were carried out and no new cases appeared.

LABORATORY EXAMINATIONS OF FOOD AND DRUGS.

The following tables present the results of the laboratory examinations of samples of food and drugs collected during the month of October, 1914: —

The cities and towns in which samples were collected were: Acton, Amesbury, Attleborough, Arlington, Bedford, Boston, Cambridge, Chelmsford, Chelsea, Clinton, Fitchburg, Framingham, Franklin, Harwich, Hingham, Lanesborough, Lenox, Lowell, Marlborough, Medford, Natick, Norwood, Palmer, Pittsfield, Randolph, Reading, Richmond, Salem, Somerville, Springfield, Sterling, Stockbridge, Wakefield, Ware, Warren, Watertown, Westfield, West Springfield, Winchester, Woburn.

Summary of Analyses.

Articles examined.	Number found to be of Good Quality.	Number adulterated or varying from the Legal Standard.	Total.
Butter,	1	–	1
Cocoa,	7	–	7
Condensed milk,	2	2	4
Confectionery,	1	–	1
Cream,	21	1	22
Cream of tartar,	2	–	2
Drugs,	68	27	95
Eggs,	–	2	2
Ice cream,	5	–	5
Jams and jellies,	5	–	5
Maple syrup,	1	–	1
Meat products: —			
Hamburg steak,	1	–	1
Sausages,	2	7	9
Milk,	431	153	584
Pickles,	–	1	1
Salad dressing,	4	–	4
Shrimp,	1	–	1
Soft drinks,	4	–	4
Spices,	1	–	1
Syrup,	1	–	1
Table sauce,	–	1	1
Totals,	558	194	752

PROSECUTIONS FOR VIOLATIONS OF THE LAW RELATING TO FOOD AND DRUGS.

Twelve convictions were secured during the month of October, 1914, for selling adulterated food and drugs, as follows: —

No.	NAME OF DEFENDANT.	Place.	Character of Article sold.
1	New York Egg and Fruit Company, . . .	Boston, . .	Broken-out eggs (decomposed).[1]
2	New York Egg and Fruit Company, . . .	Boston, . .	Broken-out eggs (decomposed).[1]
3	John W. Ruppel, . .	Springfield, .	Maple sugar (90 per cent. cane sugar).
4	George Eldredge, . .	Chatham, .	Milk (total solids, 11.12).[2]
5	Harry W. Essex, . .	Billerica, .	Milk (total solids, 12.16).[1, 3]
6	John F. Finnegan, . .	No. Billerica, .	Milk (total solids, 11.58).[3]
7	Hermān F. Passut, . .	Lowell, . .	Milk (total solids, 12.16).[3]
8	Jacob W. Smith, . .	Hull, . .	Milk (total solids, 9.50).[2]
9	Cyrus B. Udell, . .	Dracut, . .	Milk (total solids, 9.92).[1, 2]
10	George E. Young, . .	Springfield, .	Milk (total solids, 11.86).[2]
11	Nathan Schwartz, . .	Somerville, .	Sausage (contained cereal).
12	C. P. Thompson Company,	Springfield, .	Spirit of nitrous ether (not U. S. P.).

[1] Appealed. [2] Watered. [3] Skimmed.

Fines imposed, $295.

SAMPLES OF FOOD WHICH UPON EXAMINATION WERE FOUND TO BE ADULTERATED.

CONDENSED MILK.[1]

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
25762	Algonquin Creamery, Salem, ...	Anco. Austin Nichols Company, N. Y.
7827-S	Ruel Mette, Provincetown, ...	Plymouth. National Wholesale Grocery Company, Fall River.

EGGS.[2]

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
8647-S	New York Egg and Fruit Company, Boston.	
8649-S	New York Egg and Fruit Company, Boston.	

MEAT PRODUCTS.

Frankforts.[3]

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
9928-R	Robert E. Bean, Brockton.	
8417-S	Brockton Sausage Company, Brockton, . . .	Brockton Sausage Company, Brockton.
9988-R	N. Schwartz, Somerville.	

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[1] Skimmed. [2] Decomposed. [3] Contained more than 2 per cent. starch.

SAMPLES OF DRUGS WHICH UPON EXAMINATION WERE FOUND TO BE ADULTERATED.

Spirit of Anise.

Number of Sample.	Dealer.	Wholesaler or Manufacturer.	Per Cent. of Required Strength.
10014–R	A. F. Brown, Norwood, ...	– –	81
9882–R	P. V. Erard, Springfield, ...	– –	36

Spirit of Camphor.

25603	E. L. Niquette & Co., Northampton, . .	– –	74

Spirit of Nitrous Ether.

10016–R	A. F. Brown, Norwood, ...	– –	76
25764	L. Z. Carpenter, Attleborough, ...	Geo. L. Claflin Company, Providence, R. I.	84
8767–S	Phillip A. Lowe, Pittsfield, ...	– –	44
8769–S	Phillip A. Lowe, Pittsfield, ...	– –	36
8569–S	Phillip A. Lowe, Pittsfield, ...	– –	48
8579–S	Wm. C. Moulton, Pittsfield, ...	– –	63
9864–R	North Station Drug Store, Boston, . . .	– –	83
9884–R	Frank S. Stone, Springfield, ...	– –	64

Spirit of Peppermint.

8581–S	Wm. C. Moulton, Pittsfield, ...	– –	82

Peroxide of Hydrogen.

9870–R	Himmel Drug Co., Boston, ...	– –	78.3

Tincture of Iodine.

8549–S	Frank C. Hagyard, Lenox, ...	– –	37
8751–S	Frank C. Hagyard, Lenox, ...	– –	33
8775–S	Wm. C. Moulton, Pittsfield, ...	– –	71
8583–S	Wm. C. Moulton, Pittsfield, ...	– –	71

SAMPLES OF MILK AND CREAM WHICH UPON EXAMINATION WERE FOUND TO BE ADULTERATED.

Number of Sample.	Name of Dealer, Wholesaler or Producer.	Result of Analyses.
8849-S	Matthew J. Bennett, Woburn,	Total solids, 11.22 per cent.; fat, 3.30 per cent.; contained added water.
8851-S	Matthew J. Bennett, Woburn,	Total solids, 11.16 per cent.; fat, 3.40 per cent.; contained added water.
8839-S	Thomas Contalonis, Woburn,	Total solids, 10.66 per cent.; fat, 2.90 per cent.; contained added water.
8691-S	Karl Furmanick, Sterling,	Total solids, 10.22 per cent.; fat, 3.10 per cent.; contained added water.
8693-S	Karl Furmanick, Sterling,	Total solids, 10.88 per cent.; fat, 3.20 per cent.; contained added water.
25743	A. B. Paasche, Chelmsford,	Total solids, 10.60 per cent.; fat, 3.30 per cent.; contained added water.
25744	A. B. Paasche, Chelmsford,	Total solids, 10.96 per cent.; fat, 3.50 per cent.; contained added water.
q 14697	Philip Pepin, Franklin,	Total solids, 11.66 per cent.; fat, 4 per cent.; contained added water.
q 14698	Philip Pepin, Franklin,	Total solids, 11.30 per cent.; fat, 3.90 per cent.; contained added water.
q 14699	Philip Pepin, Franklin,	Total solids, 10.24 per cent.; fat, 3.50 per cent.; contained added water.
q 14700	Philip Pepin, Franklin,	Total solids, 11.26 per cent.; fat, 3.60 per cent.; contained added water.
8519-S	Springfield Creamery, Pittsfield,	Cream: fat, 14.4 per cent.; contained added water.
q 14607	John Strniste, Westfield,	Total solids, 11.34 per cent.; fat, 2.45 per cent.; proteins, 3.02 per cent.; skimmed milk.
q 14674	Whitmore A. Stuart, Framingham,	Total solids, 9.26 per cent.; fat, 2.80 per cent.; contained added water.
q 14675	Whitmore A. Stuart, Framingham,	Total solids, 9.14 per cent.; fat, 3 per cent.; contained added water.
q 14676	Whitmore A. Stuart, Framingham,	Total solids, 9.20 per cent.; fat, 3 per cent.; contained added water.
q 14677	Whitmore A. Stuart, Framingham,	Total solids, 9.28 per cent.; fat, 2.95 per cent.; contained added water.
q 14678	Whitmore A. Stuart, Framingham,	Total solids, 9.34 per cent.; fat, 3.05 per cent.; contained added water.
q 14679	Whitmore A. Stuart, Framingham,	Total solids, 8.24 per cent.; fat, 2.70 per cent.; contained added water.
q 14680	Whitmore A. Stuart, Framingham,	Total solids, 8.28 per cent.; fat, 2.70 per cent.; contained added water.
q 14681	Whitmore A. Stuart, Framingham,	Total solids, 8.20 per cent.; fat, 2.60 per cent.; contained added water.
q 14682	Whitmore A. Stuart, Framingham,	Total solids, 8.20 per cent.; fat, 2.60 per cent.; contained added water.
q 14683	Whitmore A. Stuart, Framingham,	Total solids, 8.20 per cent.; fat, 2.60 per cent.; contained added water.
q 14630	J. A. Turner, South Framingham,	Total solids, 9.32 per cent.; fat, 2.80 per cent.; contained added water.
q 14653	Samuel Watts, Natick,	Total solids, 11.82 per cent.; fat, 2.20 per cent.; proteins, 3.49 per cent.; skimmed milk.
8731-S	Leon T. Yerkes, Richmond,	Total solids, 10.50 per cent.; fat, 3.20 per cent.; contained added water.
8737-S	Leon T. Yerkes, Richmond,	Total solids, 10.46 per cent.; fat, 3.10 per cent.; contained added water.

QUARTERLY REPORT ON COLD STORAGE.

During the interval between July 1 and Oct. 1, 1914, all the cold-storage warehouses in the Commonwealth were inspected. As a result of the inspections a number of articles were condemned, confiscated and destroyed on account of being decomposed, tainted or otherwise unfit for food, as shown below.

The following tables show the quantities of articles of food placed in cold storage during the three months preceding the first day of October, 1914; also, the quantities of butter and eggs held on the first day of October, 1914: —

ARTICLES PLACED IN COLD STORAGE.

ARTICLES.	Cases.	Dozens.	Packages.	Pounds.
Eggs, case,	130,116	3,903,480	–	–
Eggs, broken,	–	–	548	568,861
Butter,	–	–	268,451	15,537,515
Poultry,	–	–	2,430 [1]	1,618,276
Game,	–	235	462	4,406
Meat, fresh,	71 [2]	–	5,485 [3]	6,683,706
Meat products, fresh (except in process of manufacture),	–	–	2,655 [4]	370,914
Fish, fresh food,	2,453 [5]	–	8	6,351,565
Totals,	132,640	3,903,715	280,039	31,135,243

[1] Includes 1 barrel.
[2] Reported as boxes.
[3] Includes 14 bundles.
[4] Includes 10 pails.
[5] Reported as barrels.

BUTTER AND EGGS HELD.

ARTICLES.	Cases.	Dozens.	Packages.	Pounds.
Eggs, case,	520,491	15,614,730	–	–
Eggs, broken,	–	–	308	8,982
Butter,	–	–	353,080	19,802,164
Total,	520,491	15,614,730	353,388	19,811,146

ARTICLES IN COLD STORAGE CONDEMNED UPON PHYSICAL EXAMINATION AS UNFIT FOR FOOD.

Date.	ARTICLES.	Weight (Pounds).	Reasons.	Disposition.
Oct. 19, 1914	Mackerel,	30	Broken and soiled,	Buried at sea.
Oct. 19, 1914	Pickerel,	20	Dried and soiled,	Buried at sea.
Oct. 24, 1914	Bluefish,	50	Soiled,	Buried at sea.
Oct. 27, 1914	Haddock,	900	Decomposed,	Rendered.
Oct. 28, 1914	Canned eggs,	350	Decomposed,	Rendered.
Oct. 30, 1914	Canned eggs,	64	Decomposed,	Buried.
Total,		1,414		

The following company was convicted in October, 1914, because fish was held in cold storage longer than twelve calendar months without the consent of the State Department of Health, in violation of section 5, chapter 652, Acts of 1912: —

Name of Defendant.	Place.	Result.
H. A. Rich Company, ...	Boston, ...	Fined $25.

During the month of October, 1914, the following convictions were secured on account of the absence of a sign marked "Cold Storage Goods Sold Here";. also, representing cold-storage goods as fresh: —

No.	Date.	Name of Defendant.	Place.	Result.
1	Oct. 13, 1914	Antonio DiStasio, ...	Maynard, .	Fined.
2	Oct. 13, 1914	James Hilferty, ...	Maynard, .	Fined.
3	Oct. 13, 1914	Matti Hekkala, ...	Maynard, .	Fined.
4	Oct. 13, 1914	Kaleva Co-operative Association, Inc.,	Maynard, .	Fined.
5	Oct. 13, 1914	Co-operative Grocery Stores Company of Boston, ...	Maynard, .	Fined.
6	Oct. 13, 1914	Co-operative Grocery Stores Company of Boston, ...	Concord, .	Fined.

Total amount of fines imposed, $30.

QUARTERLY REPORT ON THE BUSINESS OF SLAUGHTERING AND MEAT INSPECTION, JULY 1, 1914, TO OCT. 1, 1914.

During the interval between July 1 and Oct. 1, 1914, 29,630 carcasses were inspected. Of this number 29,190 passed inspection and 440 were condemned. Of this number 276 were calves, 140 cattle, 23 hogs and 1 sheep. Of the 140 cattle condemned, 134 were found to have tuberculosis. Of the 276 calves condemned, 229 were immature. Of the 23 hogs condemned, 10 were afflicted with hog cholera. Other reasons for condemnation included varied pathological conditions of the carcasses, the total number of reasons for condemnation being 20.

Of the 440 carcasses condemned, 352 were disposed of by rendering, 66 by burying and 22 by being fed to hogs and hens.

During the month of October, 1914, Barney Mirman of Great Barrington was convicted of slaughtering without the presence of an inspector of slaughtering at the time of slaughter, and was fined $25.

REPORT ON INSPECTION OF DAIRIES.

In accordance with agreement made between the Acting Commissioner of Health and the Massachusetts Milk Inspectors' Association, beginning Oct. 1, 1914, all dairies attaining a minimum score of 50, formerly rated as unclean, are to be rated in Class B.

During the month of October, 1914, 204 dairies were examined in the following places: —

PLACE.	Number examined.	Class AA.	Class A.	Class B.	Unclean Dairies.	Per Cent. Clean Dairies.
Abington,	1	–	–	1	–	100.00
Acushnet,	61	–	4	57	–	100.00
Concord,	63	–	7	55	1	98.41
Dighton,	14	–	–	3	11	21.43
Dunstable,	16	–	–	12	4	75.00
Lowell,	4	–	–	4	–	100.00
Monroe,	1	–	–	–	1	–
Northbridge,	22	–	2	12	8	63.64
Rehoboth,	1	–	–	–	1	–
Rockland,	10	–	–	8	2	80.00
Tyngsborough,	8	–	–	5	3	62.50
Tyringham,	3	–	–	2	1	66.67

Total number of dairies examined,	204
Total number of commendable dairies,	172
Total number of unclean dairies,	32
Percentage of dairies which passed inspection,	84.31

In addition to the above, 28 dairies were visited at which the sale of milk had been discontinued, 5 of which are making butter; also, 21 dairies were reported as producing less than 20 quarts of milk a day.

Included in the total number of dairies visited were 74 which had recently started in the milk-producing business and were inspected for the first time.

In the towns of Florida, New Ashford and Rowe it was found that the milk produced was not marketed as such but was turned into butter.

The names of the owners of the dairies found to be worthy of commendation follow: —

ABINGTON.

Class B.

	Per Cent.
Frasier, Edward D.,	$64\frac{3}{4}$

ACUSHNET.

Class A.

	Per Cent.
Diman, Ezra,	81½
Skonyzonski, John,	77
Varley, Richard,	77
White, W. A.,	82

Class B.

Ashley, William C.,	60
Bartlett, Henry,	67
Bennett, Charles D.,	63½
Bolduc, T.,	68½
Bouchard, Joseph,	63½
Bradford, M. O.,	74
Brownell, Joseph T.,	68½
Budd, James,	62½
Burt, Joseph W.,	62½
Chadwick, F. E.,	67
Chase, (Mrs.) J. E.,	64
Cottle, Charles V.,	55½
Douglass, J. O.,	63
Ellis, N. B.,	54
Furgundes, Manuel,	58
Geggatt, T. B.,	62
Gentilhomme, P.,	54½
Gifford, Charles E.,	64
Gilmore, A. P. R.,	59
Guinois, Pierre,	55
Hammett, John F.,	60
Harding, Otis,	57½
Hebert, Benjamin,	68½
Howland, Frank T.,	70
Jenney, Albert S.,	53
Lawton, E. T.,	63
Leit, Manuel,	67½
Leit, Manuel C.,	62½
Leonard, C. F., Jr.,	58
Leplant, Joseph,	65½
Martin, Arthur,	68½
Medaris, Manuel,	68
Morse, Edward W.,	60½
Noia, Frank,	60
Papaioannou, P.,	55
Paquette, Joseph,	64
Parker, George T.,	70½
Parker, Robert E.,	63½
Perry, Charles J.,	50½
Pierce, John W.,	51½
Provencher, O.,	60
Robinson, T. J.,	62
St. Jean, S. T.,	51
Schlais Brothers,	73½
Sears, Joseph,	71½
Shockley, William I.,	67
Smith, William & John,	65½
Tabor, Frank,	66½
Terrian, Ezra,	60
Tomkiewiez, Walter,	68
Tripp, Charles A.,	64
Tripp, Fred O.,	62½
Tripp, L. A.,	58
Tripp, Walter E.,	70½
Tripp, William R.,	65½
Weeks, Nathan H.,	63½
White, Augustus,	64

CONCORD.

Class A.

Clark, George B.,	80½
Curtis Alfred,	76¾
Howe, A. H.,	80
Hutchings, Gordon,	81
Middlesex School,	83
Moulton, Charles,	78¼
Williams, George,	81¾

Class B.

Algeo, Joseph,	61¼
Anderson, William,	68½
Baker, George,	64¾
Barry, T. M.,	60¾
Breen, James,	62½
Carrigan, M. T.,	63¼
Clark, Dana B.,	60½
Clark, E. F.,	62¾
Corkum, Joseph,	67¼
Dalton, Patrick,	57½

Class B. — Con.

	Per Cent.		Per Cent.
Davis, C. M.,	64¾	Mason, T.,	64¾
Derby, Benjamin,	64½	McGrath Brothers,	60
Derby, Charles,	63¾	McKenna, Edward,	58¾
Derby, Henry,	59¼	McManus, Daniel,	62
Fenelon, P. C.,	73	Miles, Granville,	68¼
Good Tidings Home,	61½	Neal, A. G.,	63¾
Helsher, M. O.,	65¾	Olsen, Christian,	52½
Hodgman, George W.,	59	Olsen, Mons,	53½
Howe, (Mrs.) I. B.,	70¾	Paine, Horace G.,	61¾
Hubbard, George D.,	61½	Parker, George M.,	60½
Hugh Garghill Home,	69¼	Peterson, Frank,	67¼
Jewett, L. F.,	68½	Puffer, Willis R.,	66¼
Johnson, Thore,	61	Sexton, P. J.,	58
Jones, Arthur C. H.,	65¾	Sheehan, Jeremiah,	72¼
Jones, George E.,	67	Stearns, C. E.,	61½
Keefe, Harry,	60	Tompkins, Lester,	62¾
Larson, Andt,	61¼	Tuttle, Freeland J.,	62
Larson, C. A.,	69¾	Walcott, Harry,	65¾
Lawrence, Gardner,	56	Wheeler, Alvah G.,	60¼
Lawrence, J. E.,	66½	Wheeler, Anson (Estate),	61¼
Mahan, T. Henry,	65¾	Williams, The Misses,	63
Mason, David,	59½	Worthley, Arthur B.,	60
Mason, L. F.,	62½		

DIGHTON.

Class B.

Luis, Manuel,	51¾	Whitmarsh, F. A.,	63¾
Marble, C. C.,	66½		

DUNSTABLE.

Class B.

Chartier, Jacob,	66	Glover, George,	55½
Connolly, Dennis,	63	Goss, Charles E.,	56¾
Connolly, Thomas,	50	Kendall, James E.,	52
Dickinson, C. H.,	55¾	Tacy, Alfred J.,	53
Fletcher, J. F.,	55¾	Thom & Eldredge,	55¾
Foster, G. M.,	53¾	Tully, Charles,	51¾

LOWELL.

Class B.

Avila, M. J.,	70½	Frost, C. A.,	55¼
Clough, J. H.,	61¼	Parker Brothers,	60

NORTHBRIDGE.

Class A.

Whitin, Arthur,	85	Whitin, (Mrs.) John C.,	86¼

Class B.

	Per Cent.		Per Cent.
Coutu, Onesine,	54¼	Nydam, Edward,	53¼
Dion Brothers,	57	Oelschlegel Brothers,	61½
Hammond, H. F.,	66¼	Pierce, James H.,	56½
Hayward, Frank S.,	57¼	Topp, Peter V.,	52¼
Henry, James,	50½	Visser, William,	65¾
Mahoney, Michael J.,	50	Wassenar, Klaas,	56

ROCKLAND.

Class B.

Baker, Edgar.	51½	Rudkin, W. J.,	62¼
Burke, David J.,	56½	Sheldon, F. T.,	63½
Condon, James,	62½	Smith, George A.,	63
Reed, Thomas H.,	50	Studley, Gideon,	61

TYNGSBOROUGH.

Class B.

Hunter, H. E.,	53¾	Upton, Henry H.,	63¼
Keyes, Henry J.,	50½	Vaughan, Henry E.,	54½
Phalen, S. D.,	64		

TYRINGHAM.

Class B.

Heath, Fred C.,	70¼	McCarthy, Ward,	54½

CLASSIFICATION OF DAIRIES.

AA = 90 to 100 per cent.
A = 75 to 90 per cent.
B = 50 to 75 per cent.
Below Class B (50 per cent)., unclean or dirty.

RETURNS OF DEATHS.

WEEKLY RETURNS OF DEATHS FROM DISEASES DECLARED BY THE STATE BOARD OF HEALTH TO BE DANGEROUS TO THE PUBLIC HEALTH IN CITIES AND TOWNS IN MASSACHUSETTS.

[Under the provisions of chapter 210, Acts of 1913.]

Week ending Oct. 3, 1914.

CITIES AND TOWNS.	Population. Census for 1910.	Anterior Poliomyelitis.	Cerebro-spinal Meningitis.	Diphtheria.	Glanders.	Measles.	Pellagra.	Rabies.	Scarlet Fever.	Tetanus.	Tuberculosis, Pulmonary.	Tuberculosis, Other Forms.	Typhoid Fever.	Typhus Fever.	Whooping Cough.
Boston,	686,092	–	–	5	1	1	–	–	–	–	17[1]	4[1]	2	–	2[1]
Worcester,	145,986	–	–	–	–	–	–	–	–	–	4	–	–	–	1
Fall River,	119,295	–	–	–	–	–	–	1	–	–	3	1	–	–	1
Lowell,	106,294	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Cambridge,	104,839	–	–	1	–	–	–	–	–	–	3	–	–	–	–
New Bedford,	96,652	–	–	–	–	–	–	–	3	–	1	–	–	–	–
Lynn,	89,336	–	–	–	–	–	–	–	–	–	3	–	–	–	–
Springfield,	88,926	–	–	–	–	–	–	–	–	–	2	–	–	–	–
Lawrence,	85,892	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Somerville,	77,236	–	–	2	–	–	–	–	–	–	–	–	–	–	–
Holyoke,	57,730	–	–	1	–	–	–	–	–	–	1	–	–	–	–
Brockton,	56,878	–	–	1	–	–	–	–	–	–	1	–	–	–	–
Malden,	44,404	–	–	1	–	–	–	–	–	–	2	–	–	–	–
Haverhill,	44,115	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Salem,	43,697	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Newton,	39,806	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Fitchburg,	37,826	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Taunton,	34,259	–	–	1	–	–	–	–	–	–	3	–	–	–	–
Everett,	33,484	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Quincy,	32,642	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Chelsea,	32,452	–	–	–	–	–	–	–	–	–	1	–	–	–	–

Pittsfield,	32,121	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Waltham,	27,834	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Brookline,	27,792	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Chicopee,	25,401	–	–	2	–	–	–	–	–	–	2	–	–	–	–
Gloucester,	24,398	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Medford,	23,150	–	–	1	–	–	–	–	–	–	–	–	–	–	–
North Adams,	22,019	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Northampton,	19,431	–	–	1	–	–	–	–	–	–	–	–	–	–	–
Beverly,	18,650	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Revere,	18,219	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Leominster,	17,580	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Attleborough,	16,215	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Westfield,	16,044	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Peabody,	15,721	–	–	–	–	–	–	–	–	–	1	–	–	–	–
Melrose,	15,715	–	–	–	–	–	–	–	1	–	–	–	–	–	–
Woburn,	15,308	–	–	–	–	–	–	–	–	–	1	–	–	–	–
Newburyport,	14,949	–	–	–	–	–	–	–	–	–	–	1	–	–	–
Gardner,	14,699	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Marlborough,	14,579	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Clinton,	13,075	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Milford,	13,055	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Adams,	13,026	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Framingham,	12,948	–	–	–	–	–	–	–	–	–	2	–	–	–	–
Weymouth,	12,895	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Watertown,	12,875	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Southbridge,	12,592	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Plymouth,	12,141	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Webster,	11,509	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Methuen,	11,448	–	–	1	–	–	–	–	–	–	–	–	–	–	–
Wakefield,	11,404	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Arlington,	11,187	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Greenfield,	10,427	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Winthrop,	10,132	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Total of reporting cities and towns of more than 10,000 population,	1,788,156	–	–	17	1	1	–	1	4	–	47	6	2	–	4
North Attleborough,	9,562	–	–	–	–	–	–	–	–	–	–	1	–	–	1
Montague,	6,866	–	–	–	–	–	–	–	–	–	–	–	1	–	–
Winchendon,	5,678	–	–	–	–	–	–	–	–	–	1	–	–	–	–
Merrimac,	2,202	–	–	–	–	–	–	–	–	–	1	–	–	–	–
Total of reporting towns of less than 10,000 population,	24,308	–	–	–	–	–	–	–	–	–	2	1	1	–	1

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[1] Nonresident.

Week ending Oct. 10, 1914.

CITIES AND TOWNS.	Population. Census for 1910.	Anterior Poliomyelitis.	Cerebro-spinal Meningitis.	Diphtheria.	Glanders.	Measles.	Pellagra.	Rabies.	Scarlet Fever.	Tetanus.	Tuberculosis, Pulmonary.	Tuberculosis, Other Forms.	Typhoid Fever.	Typhus Fever.	Whooping Cough.
Boston,	686,092	1	1	6[1]	–	–	1	–	2	–	18	7[2]	–	–	2
Worcester,	145,986	–	–	1	–	–	–	–	–	–	5	–	1	–	1
Fall River,	119,295	–	–	1	–	–	–	–	–	–	2	2	–	–	1
Lowell,	106,294	1	1	–	–	–	–	–	–	–	–	–	–	–	–
Cambridge,	104,839	–	–	1	–	1	–	–	–	–	3	–	–	–	1
New Bedford,	96,652	–	–	–	–	–	–	–	–	–	1	–	1	–	–
Lynn,	89,336	–	–	4	–	–	–	–	–	–	4	–	1	–	–
Springfield,	88,926	–	–	–	–	–	–	–	–	–	3	–	1	–	–
Lawrence,	85,892	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Somerville,	77,236	–	–	–	–	–	–	–	–	–	2	–	–	–	–
Holyoke,	57,730	–	–	1	–	–	–	–	–	–	1	–	–	–	–
Brockton,	56,878	–	–	2	–	–	–	–	–	–	1	–	–	–	–
Malden,	44,404	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Haverhill,	44,115	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Salem,	43,697	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Newton,	39,806	–	–	1	–	–	–	–	–	–	–	–	1	–	–
Fitchburg,	37,826	–	–	–	–	–	–	–	–	–	–	–	1	–	–
Taunton,	34,259	–	–	–	–	–	–	–	–	–	–	1	–	–	–
Everett,	33,484	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Quincy,	32,642	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Chelsea,	32,452	–	–	–	–	–	–	–	–	–	1	–	–	–	–
Pittsfield,	32,121	–	–	–	–	–	–	–	–	–	1	–	–	–	–
Waltham,	27,834	–	–	–	–	–	–	–	–	–	–	1	–	–	–
Brookline,	27,792	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Chicopee,	25,401	–	–	–	–	–	–	–	–	–	1	–	–	–	–
Gloucester,	24,398	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Medford,	23,150	–	–	–	–	–	–	–	–	–	1	–	–	–	–
North Adams,	22,019	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Northampton,	19,431	–	–	–	–	–	–	–	–	–	1	–	–	–	–
Beverly,	18,650	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Revere,	18,219	–	–	–	–	–	–	–	–	–	1	–	–	–	–
Leominster,	17,580	–	–	1	–	–	–	–	–	–	–	–	–	–	–

Attleborough,	16,215	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Westfield,	16,044	–	–	–	–	–	–	–	–	–	1[1]	–	–	–	–
Peabody,	15,721	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Melrose,	15,715	–	–	–	–	–	–	–	–	–	–	1	–	–	–
Woburn,	15,308	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Newburyport,	14,949	–	–	–	–	–	–	–	–	–	1	–	–	–	–
Gardner,	14,699	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Marlborough,	14,579	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Clinton,	13,075	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Milford,	13,055	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Adams,	13,026	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Framingham,	12,948	–	–	–	–	–	–	–	–	–	1[1]	–	–	–	–
Weymouth,	12,895	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Watertown,	12,875	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Southbridge,	12,592	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Plymouth,	12,141	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Webster,	11,509	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Methuen,	11,448	–	–	–	–	–	–	–	–	–	1	–	–	–	–
Wakefield,	11,404	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Arlington,	11,187	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Greenfield,	10,427	–	–	–	–	–	–	–	–	–	1	–	–	–	–
Winthrop,	10,132	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Total of reporting cities and towns of more than 10,000 population,	2,018,874	2	2	18	–	1	1	–	2	–	51	12	6	–	5
North Attleborough,	9,562	–	–	–	–	–	–	–	–	–	1	–	–	–	–
Norwood,	8,014	–	1	–	–	–	–	–	–	–	–	–	–	–	–
Boxborough,	317	–	–	1	–	–	–	–	–	–	–	–	–	–	–
Total of reporting towns of less than 10,000 population,	17,893	–	1	1	–	–	–	–	–	–	1	–	–	–	–

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[1] One nonresident.

[2] Two nonresidents.

Week ending Oct. 17, 1914.

CITIES AND TOWNS.	Population. Census for 1910.	Anterior Poliomyelitis.	Cerebro-spinal Meningitis.	Diphtheria.	Glanders.	Measles.	Pellagra.	Rabies.	Scarlet Fever.	Tetanus.	Tuberculosis, Pulmonary.	Tuberculosis, Other Forms.	Typhoid Fever.	Typhus Fever.	Whooping Cough.
Boston,	686,092	–	–	5[1]	–	–	–	–	2	1	15[2]	2	1	–	2
Worcester,	145,986	–	–	1	–	–	–	–	–	–	2	–	–	–	–
Fall River,	119,295	–	–	–	–	–	–	–	–	–	3	1	–	–	–
Lowell,	106,294	–	–	–	–	–	–	–	–	–	2	–	–	–	–
Cambridge,	104,839	–	–	–	–	–	–	–	–	–	3	–	1	–	–
New Bedford,	96,652	–	–	–	–	–	–	–	–	–	3	–	–	–	–
Lynn,	89,336	–	–	1	–	–	–	–	–	–	3	–	–	–	–
Springfield,	88,926	–	–	–	–	–	–	–	–	–	4	–	–	–	–
Lawrence,	85,892	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Somerville,	77,236	–	–	–	–	–	–	–	–	–	1	–	–	1	–
Holyoke,	57,730	–	–	–	–	–	–	–	–	–	2	–	–	–	–
Brockton,	56,878	–	–	2	–	–	–	–	–	–	–	–	1	–	–
Malden,	44,404	–	1	–	–	–	–	–	–	–	–	–	–	–	–
Haverhill,	44,115	–	–	–	–	–	–	–	–	–	4	–	1	–	–
Salem,	43,697	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Newton,	39,806	–	–	–	–	–	–	–	–	–	–	–	–	1	–
Fitchburg,	37,826	–	–	–	–	–	–	–	–	–	2	–	–	–	–
Taunton,	34,259	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Everett,	33,484	–	–	–	–	–	–	–	–	–	1	–	–	–	–
Quincy,	32,642	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Chelsea,	32,452	–	–	–	–	1	–	–	–	–	–	–	–	–	–
Pittsfield,	32,121	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Waltham,	27,834	–	–	1	–	–	–	–	–	–	1	–	–	–	–
Brookline,	27,792	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Chicopee,	25,401	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Gloucester,	24,398	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Medford,	23,150	–	–	–	–	–	–	–	–	–	–	–	1	–	–
North Adams,	22,019	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Northampton,	19,431	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Beverly,	18,650	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Revere,	18,219	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Leominster,	17,580	–	–	–	–	–	–	–	–	–	–	–	–	–	–

Attleborough,	16,215	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Westfield,	16,044	–	–	–	–	–	–	–	–	–	1[2]	–	–	–	–
Peabody,	15,721	–	–	1	–	–	–	–	–	–	–	1	–	–	–
Melrose,	15,715	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Woburn,	15,308	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Newburyport,	14,949	–	–	1	–	–	–	–	–	–	–	–	–	–	–
Gardner,	14,699	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Marlborough,	14,579	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Clinton,	13,075	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Milford,	13,055	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Adams,	13,026	–	–	–	–	–	–	–	–	–	1	–	–	–	–
Framingham,	12,948	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Weymouth,	12,895	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Watertown,	12,875	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Southbridge,	12,592	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Plymouth,	12,141	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Webster,	11,509	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Methuen,	11,448	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Wakefield,	11,404	–	–	1	–	–	–	–	–	–	–	–	–	–	–
Arlington,	11,187	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Greenfield,	10,427	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Winthrop,	10,132	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Total of reporting cities and towns of more than 10,000 population,	1,983,479	–	1	13	–	1	–	–	2	1	48	4	5	2	2
Montague,	6,866	–	–	1	–	–	–	–	–	–	–	–	–	–	–
Needham,	5,026	–	–	–	–	–	–	–	1	–	1	–	2	–	–
Total of reporting towns of less than 10,000 population,	11,892	–	–	1	–	–	–	–	1	–	1	–	2	–	–

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[1] Two nonresidents.

[2] One nonresident.

Week ending Oct. 24, 1914.

CITIES AND TOWNS.	Population. Census for 1910.	Anterior Poliomyelitis.	Cerebro-spinal Meningitis.	Diphtheria.	Glanders.	Measles.	Pellagra.	Rabies.	Scarlet Fever.	Tetanus.	Tuberculosis, Pulmonary.	Tuberculosis, Other Forms.	Typhoid Fever.	Typhus Fever.	Whooping Cough.
Boston,	686,092	–	1	1	1	–	–	–	1	–	16	8[1]	1	–	1
Worcester,	145,986	–	–	–	–	–	–	–	–	–	2	1	–	–	–
Fall River,	119,295	–	–	–	–	1	–	–	–	–	4	–	–	–	1
Lowell,	106,294	1	–	–	–	–	–	–	–	–	2	1	1	–	–
Cambridge,	104,839	–	–	–	–	1	–	–	–	–	1	–	–	–	1
New Bedford,	96,652	1	–	–	–	–	–	–	–	–	3	–	1	–	–
Lynn,	89,336	–	–	1	–	–	–	–	–	–	1	–	–	–	–
Springfield,	88,926	–	–	–	–	–	–	–	–	–	2	2	2	–	–
Lawrence,	85,892	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Somerville,	77,236	–	–	1	–	–	–	–	–	–	1	1	–	–	–
Holyoke,	57,730	–	–	–	–	–	–	–	–	–	2	1	–	–	–
Brockton,	56,878	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Malden,	44,404	–	–	1	–	–	–	–	–	–	2	1	–	–	–
Haverhill,	44,115	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Salem,	43,697	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Newton,	39,806	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Fitchburg,	37,826	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Taunton,	34,259	–	–	–	–	–	–	–	–	–	1	–	–	–	–
Everett,	33,484	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Quincy,	32,642	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Chelsea,	32,452	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Pittsfield,	32,121	–	–	–	–	–	–	–	–	–	3	–	–	–	–
Waltham,	27,834	–	–	–	–	–	–	–	–	–	1	–	–	–	–
Brookline,	27,792	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Chicopee,	25,401	–	–	2	–	–	–	–	–	–	2	–	–	–	–
Gloucester,	24,398	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Medford,	23,150	–	–	–	–	–	–	–	–	–	–	–	–	–	–
North Adams,	22,019	–	–	–	–	–	–	–	–	–	1	–	–	–	–
Northampton,	19,431	–	–	1	–	–	–	–	–	–	1	–	–	–	–
Beverly,	18,650	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Revere,	18,219	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Leominster,	17,580	–	–	–	–	–	–	–	–	–	–	–	–	–	–

Attleborough,	16,215	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Westfield,	16,044	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Peabody,	15,721	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Melrose,	15,715	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Woburn,	15,308	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Newburyport,	14,949	–	–	1	–	–	–	–	–	–	–	–	–	–	–
Gardner,	14,699	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Marlborough,	14,579	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Clinton,	13,075	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Milford,	13,055	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Adams,	13,026	–	–	1	–	–	–	–	–	–	–	–	–	–	–
Framingham,	12,948	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Weymouth,	12,895	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Watertown,	12,875	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Southbridge,	12,592	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Plymouth,	12,141	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Webster,	11,509	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Methuen,	11,448	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Wakefield,	11,404	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Arlington,	11,187	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Greenfield,	10,427	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Winthrop,	10,132	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Total of reporting cities and towns of more than 10,000 population,	1,716,904	2	1	9	1	2	–	–	1	–	45	15	5	–	3
Winchester,	9,309	–	–	–	–	–	–	–	–	–	1	–	–	–	–
Winchendon,	5,678	–	–	–	–	–	–	–	–	–	1	1	–	–	–
Oxford,	3,361	–	–	2	–	–	–	–	–	–	–	–	–	–	–
Douglas,	2,152	–	–	–	–	–	–	–	–	–	–	1	–	–	–
Total of reporting towns of less than 10,000 population,	20,500	–	–	2	–	–	–	–	–	–	2	2	–	–	–

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[1] Three nonresidents.

Week ending Oct. 31, 1914.

CITIES AND TOWNS.	Population. Census for 1910.	Anterior Poliomyelitis.	Cerebro-spinal Meningitis.	Diphtheria.	Glanders.	Measles.	Pellagra.	Rabies.	Scarlet Fever.	Tetanus.	Tuberculosis, Pulmonary.	Tuberculosis, Other Forms.	Typhoid Fever.	Typhus Fever.	Whooping Cough.
Boston,	686,092	–	–	4	–	–	–	–	–	–	30	2	2	–	1
Worcester,	145,986	–	–	–	–	–	–	–	–	–	2	1	–	–	–
Fall River,	119,295	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Lowell,	106,294	–	1	1	–	–	–	–	–	–	3	–	–	–	1
Cambridge,	104,839	–	–	1	–	1	–	–	–	–	5	2	–	–	–
New Bedford,	96,652	–	–	1	–	–	–	–	–	–	1	2	–	–	–
Lynn,	89,336	–	–	1	–	–	–	–	–	–	–	2	–	–	–
Springfield,	88,926	–	–	–	–	–	–	–	–	–	3	2	–	–	–
Lawrence,	85,892	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Somerville,	77,236	–	–	–	–	–	–	–	1	–	–	–	–	–	–
Holyoke,	57,730	–	–	1	–	–	–	–	–	–	1	–	–	–	–
Brockton,	56,878	–	–	–	–	–	–	–	–	–	2	–	–	–	–
Malden,	44,404	–	–	1	–	–	–	–	–	–	–	–	–	–	–
Haverhill,	44,115	–	–	–	–	–	–	–	–	–	–	–	2	–	–
Salem,	43,697	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Newton,	39,806	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Fitchburg,	37,826	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Taunton,	34,259	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Everett,	33,484	–	–	1	–	–	–	–	–	–	–	–	–	–	–
Quincy,	32,642	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Chelsea,	32,452	–	–	–	–	–	–	–	–	–	1	–	–	–	–
Pittsfield,	32,121	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Waltham,	27,834	–	–	–	–	–	–	–	–	–	2	–	–	–	–
Brookline,	27,792	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Chicopee,	25,401	–	–	2	–	–	–	–	–	–	1	–	–	–	–
Gloucester,	24,398	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Medford,	23,150	–	–	1	–	–	–	–	–	–	–	–	–	–	–
North Adams,	22,019	–	–	–	–	–	–	–	–	–	1	–	–	–	–
Northampton,	19,431	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Beverly,	18,650	–	–	–	–	–	–	–	–	–	1	–	–	–	–
Revere,	18,219	–	1	–	–	–	–	–	–	–	–	–	–	–	–
Leominster,	17,580	–	–	–	–	–	–	–	–	–	–	–	–	–	–

Attleborough,	16,215	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Westfield,	16,044	–	–	–	–	–	–	–	–	–	1[1]	–	–	–	–
Peabody,	15,721	–	1	–	–	–	–	–	–	–	–	–	–	–	–
Melrose,	15,715	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Woburn,	15,308	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Newburyport,	14,949	1	–	–	–	–	–	–	–	–	–	–	–	–	–
Gardner,	14,699	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Marlborough,	14,579	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Clinton,	13,075	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Milford,	13,055	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Adams,	13,026	–	–	1	–	–	–	–	–	–	–	–	–	–	–
Framingham,	12,948	–	–	–	–	–	–	–	–	–	–	1	–	–	–
Weymouth,	12,895	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Watertown,	12,875	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Southbridge,	12,592	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Plymouth,	12,141	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Webster,	11,509	–	–	–	–	–	–	–	–	–	1	–	–	–	–
Methuen,	11,448	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Wakefield,	11,404	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Arlington,	11,187	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Greenfield,	10,427	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Winthrop,	10,132	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Total of reporting cities and towns of more than 10,000 population,	1,883,894	1	3	15	–	1	–	–	1	–	55	12	4	–	2
Blackstone,	5,648	–	–	–	–	–	–	–	–	–	2	–	–	–	–
Tewksbury,	3,750	–	–	–	–	–	–	–	–	–	1	–	–	–	–
Deerfield,	2,209	–	–	1	–	–	–	–	–	–	–	–	–	–	–
Boylston,	714	–	–	–	–	–	–	–	–	–	1	–	–	–	–
Total of reporting towns of less than 10,000 population,	12,321	–	–	1	–	–	–	–	–	–	4	–	–	–	–

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[1] One nonresident.

RETURNS OF DISEASES.

Cases of Diseases declared by the State Department of Health to be Dangerous to the Public Health.

[Under the provisions of section 52 of chapter 75 of the Revised Laws.]

DISEASE.	Week ending —					
	Oct. 3.	Oct. 10.	Oct. 17.	Oct. 24.	Oct. 31.	Total.
Actinomycosis,	–	–	1	–	1	2
Anterior poliomyelitis,	6	7	10	4	6	33
Anthrax,	1	–	–	–	–	1
Chicken-pox,	33	16	73	65	68	255
Diphtheria,	179	223	205	246	295	1,148
Dog bite,	5	2	–	4	–	11
Dysentery, bacillary,	–	–	–	–	1	1
Epidemic cerebro-spinal meningitis,	1	4	2	2	4	13
German measles,	–	3	–	–	5	8
Glanders,	1	–	–	1	–	2
Malaria,	–	–	–	1	–	1
Measles,	37	46	89	120	113	405
Mumps,	5	3	1	5	8	22
Ophthalmia neonatorum,	35	56	33	47	43	214
Pellagra,	–	1	–	1	–	2
Scarlet fever,	95	112	117	119	109	552
Septic sore throat,	–	1	2	3	8	14
Suppurative conjunctivitis,	–	–	–	1	–	1
Tetanus,	1	–	–	1	1	3
Trachoma,	3	1	–	1	1	6
Tuberculous meningitis,	3	2	1	2	1	9
Tuberculosis, pulmonary,	109	124	137	108	139	617
Tuberculosis, other forms,	7	6	4	11	6	34
Typhoid fever,	97	90	118	75	74	454
Whooping cough,	33	37	38	28	42	178

PUBLIC HEALTH BULLETIN

ISSUED MONTHLY

BY THE

STATE DEPARTMENT OF HEALTH

OF MASSACHUSETTS

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Approved by
The State Board of Publication.

PUBLIC HEALTH BULLETIN.

Allan J. McLaughlin, M.D., *Commissioner of Health.*

DIPHTHERIA IN HOLYOKE.

Twenty-nine cases of diphtheria were reported by the Holyoke board of health, the first on August 20 and the last on November 4. Since November 4 no cases have been reported from the Springdale district. The 29 cases occurred in 20 homes. In 15 families there was 1 case each; in 2 families, 2 cases each; in 2 families, 3 cases each; and in 1 family, 4 cases. The 10 houses were apartment houses. The ages of the patients varied from two to fourteen. The epidemic occurred soon after the opening of the Springdale School on September 8.

There were 3 deaths, 1 in October and 2 in November.

The probable cause of the epidemic was some mild unrecognized diphtheria bacillus carrier. It could not be ascertained whether the infection actually started within or without the school; that it spread among the school children, however, is a known fact, and undoubtedly by direct contact.

LABORATORY EXAMINATIONS OF FOOD AND DRUGS.

The following tables present the results of the laboratory examinations of samples of food and drugs collected during the month of November, 1914: —

The cities and towns in which samples were collected were: Andover, Attleborough, Billerica, Boston, Bridgewater, Brookline, Cambridge, Chelmsford, Chelsea, Chicopee, Danvers, Dracut, Framingham, Franklin, Gloucester, Lawrence, Lenox, Lowell, Malden, Melrose, New Bedford, Newton, Palmer, Pittsfield, Quincy, Reading, Salem, Stoneham, Swampscott, Taunton, Watertown, Westfield, Winthrop, Woburn.

SUMMARY OF ANALYSES.

ARTICLES EXAMINED.	Number found to be of Good Quality.	Number adulterated or varying from the Legal Standard.	Total.
Canned meats,	1	–	1
Cider,	3	–	3
Cocoa,	2	–	2
Confectionery,	1	–	1
Cream,	12	–	12
Cream of tartar,	1	–	1
Drugs,	63	5	68
Eggs,	2	–	2
Flavoring extracts: —			
Peppermint,	1	–	1
Vanilla,	10	4	14
Honey,	2	–	2
Horse-radish,	2	–	2
Jams and jellies,	6	–	6
Malt liquor,	1	–	1
Maple sugar,	–	1	1
Maple syrup,	1	4	5
Meat products: —			
Hamburg steak,	1	–	1
Sausages,	7	15	22
Milk,	328	57	385
Olive oil,	1	–	1
Shrimp,	8	–	8
Spices,	2	–	2
Totals,	455	86	541

PROSECUTIONS FOR VIOLATIONS OF THE LAW RELATING TO FOOD AND DRUGS.

Six convictions were secured during the month of November, 1914, for selling adulterated food, as follows: —

No.	NAME OF DEFENDANT.	Place.	Character of Article sold.
1	Clarence M. Kenney,	Pittsfield,	Cream (fat, 14.4).[1]
2	Matthew J. Bennett,	Woburn,	Milk (total solids, 11.22).[1]
3	Thomas Contalonis,	Woburn,	Milk (total solids, 10.66).[1]
4	Peter Gallagher,	Marblehead,	Milk (total solids, 10.78).[1]
5	W. A. Stuart,	Framingham,	Milk (total solids, 8.20).[1]
6	Leon T. Yerkes,	Richmond,	Milk (total solids, 10.46).[1]

[1] Watered.

Fines imposed, $152.10.

SAMPLES OF FOOD WHICH UPON EXAMINATION WERE FOUND TO BE ADULTERATED.

MAPLE SUGAR.[1]

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
24405	Fruit Store, 1465 Washington Street, Boston.	

MAPLE SYRUP.[1]

8795–S		New England Maple Syrup Company, Cambridge, Mass.
8797–S		New England Maple Syrup Company, Cambridge, Mass.
26208	Bay State Market, New Bedford.	
8995–S		New England Maple Syrup Company, Cambridge, Mass.

SAUSAGES.[2]

26191	Consolidated Stores, New Bedford.	
26192	Consolidated Stores, New Bedford.	
8879–S		Parks Sausage and Provision Company, Boston.
26195	Delicatessen Store, 190 Purchase Street, New Bedford.	
26196	Delicatessen Store, 190 Purchase Street, New Bedford.	
8963–S	B. E. Fredericks, Pittsfield,	Own make.
8965–S	B. E. Fredericks, Pittsfield,	Own make.
9023–S		Parks Sausage and Provision Company, Boston.
q14805	Smith's Pork Store, Lowell.	
9139–S		Parks Sausage and Provision Company, Boston.
9025–S		F. Baldau, Boston.

VANILLA FLAVORING EXTRACT.

25497	Neale Brothers, Boston,[3]	Hygiene Vanilla Flavor. Artificial. Hygiene Company, Jamaica Plain, Mass.
9340–R	Norwood Cash Grocery, Norwood.[4]	
25503	Dickson's Tea Store, Lowell,[5]	Hull's Compound Vanilla. Geo. S. Hull & Co., Lowell.
25670	Mohican Company, Springfield,[6]	Mohican Vanilla Substitute. The Mohican Company, New York.

---

[1] Contained cane sugar.

[2] Contained more than 2 per cent. starch.

[3] Contained coumarin; no formula stating per cent. of ingredients.

[4] Solution of vanillin; contained no vanilla.

[5] Per cent. of ingredients not correctly stated.

[6] Formula incorrect; per cent. of ingredients not stated on label.

SAMPLES OF DRUGS WHICH UPON EXAMINATION WERE FOUND TO BE ADULTERATED.

ESSENCE OF PEPPERMINT.

Number of Sample.	DEALER.	Wholesaler or Manufacturer.	Per Cent. of Required Strength.
26050	Codman Square Pharmacy, Boston, . . .	– –	75
26147	Lynde & Gould, Palmer, ...	– –	50

TINCTURE OF IODINE.

Number of Sample.	DEALER.	Wholesaler or Manufacturer.	Per Cent. of Required Strength.
26031	J. T. Mahoney, Roxbury, ...	– –	69
26055	Pharmacy, Washington Street, Dorchester, .	– –	79

SAMPLES OF MILK WHICH UPON EXAMINATION WERE FOUND TO BE ADULTERATED.

Number of Sample.	Name of Dealer, Wholesaler or Producer.	Result of Analyses.
q 14828	Robert Bradford, Framingham, . .	Total solids, 11.54 per cent.; fat, 3.70 per cent.; contained added water.
q 14829	Robert Bradford, Framingham, . .	Total solids, 11.60 per cent.; fat, 3.70 per cent.; contained added water.
q 14830	Robert Bradford, Framingham, . .	Total solids, 11.28 per cent.; fat, 3.50 per cent.; contained added water.
q 14831	Robert Bradford, Framingham, . .	Total solids, 11.33 per cent.; fat, 3.40 per cent.; contained added water.
q 14832	Robert Bradford, Framingham, . .	Total solids, 11.30 per cent.; fat, 3.50 per cent.; contained added water.
25997	J. J. Collins, Brookline, ...	Total solids, 10.88 per cent.; fat, 2.05 per cent.; proteins, 2.90 per cent.; skimmed milk.
q 14891	W. P. Elliot, East Lynn, . . .	Total solids, 10.92 per cent.; fat, 3.05 per cent.; contained added water.
q 14892	W. P. Elliot, East Lynn, . . .	Total solids, 11.26 per cent.; fat, 3.30 per cent.; contained added water.
26169	Sirkis Kashanian, West Andover, . .	Total solids, 11.18 per cent.; fat, 3.70 per cent.; contained added water.
26170	Sirkis Kashanian, West Andover, . .	Total solids, 11.14 per cent.; fat, 3.60 per cent.; contained added water.
26171	Sirkis Kashanian, West Andover, . .	Total solids, 11.22 per cent.; fat, 3.60 per cent.; contained added water.
26172	Sirkis Kashanian, West Andover, . .	Total solids, 11.24 per cent.; fat, 3.40 per cent.; contained added water.
26173	Sirkis Kashanian, West Andover, . .	Total solids, 10.86 per cent.; fat, 3.20 per cent.; contained added water.
26174	Sirkis Kashanian, West Andover, . .	Total solids, 10.88 per cent.; fat, 3.30 per cent.; contained added water.
q 14861	Wilton A. Pond, Franklin, . . .	Total solids, 12.30 per cent.; fat, 4.50 per cent.; contained added water.
q 14866	H. A. Van Leeuwen, Franklin, . .	Total solids, 12.10 per cent.; fat, 2.60 per cent.; proteins, 3.70 per cent.; skimmed milk.

COLD STORAGE OF FOOD.

ARTICLES IN COLD STORAGE CONDEMNED UPON PHYSICAL EXAMINATION AS UNFIT FOR FOOD.

Date.	Articles.	Weight (Pounds).	Reasons.	Disposition.
Nov. 5, 1914	Eels,	1,390	Sour and tainted,	Rendered.
Nov. 13, 1914	Chickens,	32	Decomposed,	Incinerated.
Nov. 17, 1914	Chickens,	355	Tainted,	Rendered.
Nov. 19, 1914	Herring,	10,395	Decomposed and soiled,	Rendered.
Total,		12,172		

During the month of November, 1914, two convictions were secured on account of the absence of a sign marked "Cold Storage Goods Sold Here".

No.	Date.	Name of Defendant.	Place.	Result.
1	Nov. 18, 1914	William N. Anderson,	Brockton,	Fined.
2	Nov. 18, 1914	Edward A. Rosendahl,	Brockton,	Fined.

Total amount of fines imposed, $20.

In addition to the above, B. F. Phillips Company of Boston was fined $25 on Nov. 24, 1914, for holding articles of food in cold storage longer than twelve calendar months without the consent of the State Department of Health.

REPORT ON THE PROSECUTIONS CONCERNING THE SALE OF EGGS TAKEN FROM COLD STORAGE.

CHAPTER 538, ACTS OF 1913.

One conviction was secured during the month of November, 1914, that of Edward A. Rosendahl of Brockton, on account of retailing cold-storage eggs without having the container marked. The case was placed on file.

SLAUGHTERING AND MEAT INSPECTION.

During the month of November, 1914, four convictions were secured, for the following reasons: —

On Account of Slaughtering in the Absence of an Inspector of Slaughtering.

No.	Date.	NAME OF DEFENDANT.	Place.	Result.
1	Nov. 5, 1914	Morris Resnick, . . .	Plymouth, . .	Fined.[1]
2	Nov. 18, 1914	Charles Richards, . . .	Marion, . .	Fined.

[1] Appealed.

For having Unstamped Meat in their Possession with Intent to sell.

No.	Date.	NAME OF DEFENDANT.	Place.	Result.
3	Nov. 13, 1914	J. Keller & S. Kremer, . .	Dracut, . .	Fined.

Being an Inspector of Slaughtering, did illegally allow the Use of his Branding Stamp.

No.	Date.	NAME OF DEFENDANT.	Place.	Result.
4	Nov. 18, 1914	John E. Allen, . . .	Marion, . .	Case filed.

Total amount of fines imposed, $80.

REPORT ON INSPECTION OF DAIRIES.

During the month of November, 1914, 3 dairies were examined in the following places: —

PLACE.	Number examined.	Class AA.	Class A.	Class B.	Unclean Dairies.	Per Cent. Clean Dairies.
Lincoln, . . .	2	–	2	–	–	100.00
Stoneham, . . .	1	–	–	–	1	–

The above dairies were examined upon special request and not as a part of the general investigation.

The name of the owner of the dairies found to be worthy of commendation follows: —

LINCOLN.

Class A.

	Per Cent.		Per Cent.
Blodgett, William A. (1),	83.60	Blodgett, William A. (2),	78.35

CLASSIFICATION OF DAIRIES.

AA = 90 to 100 per cent.
A = 75 to 90 per cent.
B = 50 to 75 per cent.
Below Class B (50 per cent.), unclean or dirty.

Owing to the prevalence of foot-and-mouth disease among cattle in a number of the milk-producing places in the State, the regular inspection of dairies was discontinued on and after Nov. 1, 1914.

RETURNS OF DISEASES.

CASES OF DISEASES DECLARED BY THE STATE DEPARTMENT OF HEALTH TO BE DANGEROUS TO THE PUBLIC HEALTH.

[Under the provisions of section 52 of chapter 75 of the Revised Laws.]

DISEASE.	WEEK ENDING —				
	Nov. 7.	Nov. 14.	Nov. 21.	Nov. 28.	Total.
Anterior poliomyelitis,	4	3	2	–	9
Anthrax,	1	–	–	–	1
Chicken-pox,	94	112	175	151	532
Diphtheria,	300	273	279	256	1,108
Dog bite,	–	1	–	1	2
Epidemic cerebro-spinal meningitis,	2	6	2	1	11
German measles,	2	1	6	2	11
Infectious diseases of the eye,	63 [1]	62 [1]	49 [1]	53 [1]	227 [1]
Malaria,	–	1	–	–	1
Measles,	176	202	215	229	822
Mumps,	5	4	12	13	34
Pellagra,	1	–	2	–	3
Scarlet fever,	135	154	156	148	593
Septic sore throat,	3	–	2	2	7
Tetanus,	–	2	–	–	2
Trichinosis,	–	–	1	–	1
Tuberculosis, pulmonary,	128	134	105	122	489
Tuberculosis, other forms,	3	7	5	1	16
Tuberculous meningitis,	1	2	1	1	5
Typhoid fever,	60	48	45	48	201
Whooping cough,	51	55	58	30	194

[1] Ophthalmia neonatorum.

RETURNS OF DEATHS.

WEEKLY RETURNS OF DEATHS FROM DISEASES DECLARED BY THE STATE DEPARTMENT OF HEALTH TO BE DANGEROUS TO THE PUBLIC HEALTH IN CITIES AND TOWNS IN MASSACHUSETTS.

[Under the provisions of chapter 210, Acts of 1913.]

Week ending Nov. 7, 1914.

CITIES AND TOWNS.	Population. Census for 1910.	Anterior Poliomyelitis.	Cerebro-spinal Meningitis.	Diphtheria.	Measles.	Pellagra.	Scarlet Fever.	Tetanus.	Tuberculosis, Pulmonary.	Tuberculosis, Other Forms.	Typhoid Fever.	Whooping Cough.
Boston,	686,092	-	-	2	-	-	-	-	17	4	-	1
Worcester,	145,986	-	-	-	-	-	-	-	3	-	-	1
Fall River,	119,295	-	-	-	-	-	1	-	4	-	-	-
Lowell,	106,294	-	-	-	-	-	-	-	1	3	1	-
Cambridge,	104,839	-	-	1	-	-	1	-	1	1	-	-
New Bedford,	96,652	-	-	2	-	-	-	-	3	-	1	-
Lynn,	89,336	-	-	-	-	-	1	-	2	-	2	-
Springfield,	88,926	-	-	-	-	-	-	-	1	-	-	1
Lawrence,	85,892	-	-	-	-	-	-	-	-	-	-	-
Somerville,	77,236	-	-	1	-	-	-	-	1	1	-	-
Holyoke,	57,730	-	-	2	-	-	-	-	3	1	-	-
Brockton,	56,878	-	-	1	-	-	-	-	-	-	1	-
Malden,	44,404	-	-	1	-	-	-	-	1	-	-	-
Haverhill,	44,115	-	-	-	-	-	-	-	2	-	-	-
Salem,	43,697	-	-	-	-	-	-	-	-	-	-	-
Newton,	39,806	-	-	-	-	-	-	-	-	-	-	-
Fitchburg,	37,826	-	-	1	-	-	-	-	-	-	-	-
Taunton,	34,259	-	-	-	-	-	-	-	2	-	-	-
Everett,	33,484	-	-	1	-	-	-	-	-	-	-	-
Quincy,	32,642	-	-	-	-	-	-	-	-	-	-	-
Chelsea,	32,452	-	-	-	-	-	-	-	-	-	-	-

Pittsfield,	32,121	–	–	–	–	–	–	–	–	–	–	–
Waltham,	27,834	–	–	–	–	–	–	–	–	–	–	–
Brookline,	27,792	–	–	–	–	–	–	–	–	–	–	–
Chicopee,	25,401	–	–	3	–	–	–	–	2	–	–	–
Gloucester,	24,398	–	–	–	–	–	–	–	–	–	–	–
Medford,	23,150	–	–	–	–	–	–	–	–	–	–	–
North Adams,	22,019	–	–	–	–	–	–	–	–	–	–	–
Northampton,	19,431	–	–	–	–	–	–	–	–	–	–	–
Beverly,	18,650	–	–	–	–	–	–	–	–	–	–	–
Revere,	18,219	–	–	–	–	–	–	–	–	–	–	–
Leominster,	17,580	–	–	1	–	–	–	–	1	–	–	–
Attleborough,	16,215	–	–	–	–	–	–	–	–	–	–	–
Westfield,	16,044	–	–	–	–	–	–	–	–	–	–	–
Peabody,	15,721	–	–	–	–	–	–	–	2	–	–	–
Melrose,	15,715	–	–	–	–	–	–	–	–	–	–	–
Woburn,	15,308	–	–	–	–	–	–	–	–	–	–	–
Newburyport,	14,949	–	–	1	–	–	–	–	1	–	–	–
Gardner,	14,699	–	–	–	–	–	–	–	–	–	–	–
Marlborough,	14,579	–	–	–	–	–	–	–	–	–	–	–
Clinton,	13,075	–	–	–	–	–	–	–	–	–	–	–
Milford,	13,055	–	–	–	–	–	–	–	–	–	–	–
Adams,	13,026	–	–	–	–	–	–	–	–	–	–	–
Framingham,	12,948	–	–	–	–	–	–	–	–	–	–	–
Weymouth,	12,895	–	–	–	–	–	–	–	–	–	–	–
Watertown,	12,875	–	–	–	–	–	–	–	–	–	–	–
Southbridge,	12,592	–	–	–	–	–	–	–	–	–	–	–
Plymouth,	12,141	–	–	–	–	–	–	–	–	–	–	–
Webster,	11,509	–	–	–	–	–	–	–	1	–	–	–
Methuen,	11,448	–	–	–	–	–	–	–	–	–	–	–
Wakefield,	11,404	–	–	–	–	–	–	–	–	1	–	–
Arlington,	11,187	–	–	–	–	–	–	–	–	–	–	–
Greenfield,	10,427	–	–	–	–	–	–	–	–	–	–	–
Winthrop,	10,132	–	–	–	–	–	–	–	–	–	–	–
Total of reporting cities and towns of more than 10,000 population,	1,919,916	–	–	17	–	–	3	–	48	11	5	3
Northbridge,	8,807	–	1	–	–	–	–	–	–	2	–	–
Maynard,	6,390	–	–	–	–	–	–	–	1	–	–	–
Warren,	4,188	–	–	1	–	–	–	–	–	–	–	–
Medfield,	3,466	–	–	–	–	–	–	–	–	1	–	–
Sutton,	3,078	–	1	–	–	–	–	–	–	–	–	–
Kingston,	2,445	–	–	–	–	–	–	–	–	–	1	–
Deerfield,	2,209	–	–	3	–	–	–	–	–	–	–	–
Avon,	2,013	–	–	1	–	–	–	–	–	–	–	–
Westwood,	1,266	–	–	1	–	–	–	–	–	–	–	–
Total of reporting towns of less than 10,000 population,	31,859	–	2	6	–	–	–	–	1	3	1	–

Week ending Nov. 14, 1914.

CITIES AND TOWNS.	Population. Census for 1910.	Anterior Poliomyelitis.	Cerebro-spinal Meningitis.	Diphtheria.	Measles.	Pellagra.	Scarlet Fever.	Tetanus.	Tuberculosis, Pulmonary.	Tuberculosis, Other Forms.	Typhoid Fever.	Whooping Cough.
Boston,	686,092	–	2[1]	4	2	–	1	1	16	5[1]	1	1
Worcester,	145,986	–	–	–	–	–	–	–	2	–	–	–
Fall River,	119,295	1	–	–	1	–	–	–	2	1	–	1
Lowell,	106,294	–	–	2	–	–	–	–	2	–	–	–
Cambridge,	104,839	–	–	–	–	–	–	–	4	–	–	–
New Bedford,	96,652	–	–	–	–	–	1	–	–	–	–	–
Lynn,	89,336	–	–	–	–	–	–	–	1	–	–	–
Springfield,	88,926	–	–	1	–	–	–	–	1	–	–	–
Lawrence,	85,892	–	–	–	–	–	–	–	–	–	–	–
Somerville,	77,236	–	–	–	–	–	–	–	2	–	1	–
Holyoke,	57,730	–	–	–	–	–	–	–	1	–	–	–
Brockton,	56,878	–	–	–	1	–	–	–	–	–	–	–
Malden,	44,404	–	–	–	–	–	–	–	–	–	–	–
Haverhill,	44,115	–	1	–	–	–	–	–	–	–	–	–
Salem,	43,697	–	–	–	–	–	–	–	–	–	–	–
Newton,	39,806	–	–	–	–	–	–	–	–	–	–	–
Fitchburg,	37,826	–	–	–	–	–	–	–	–	–	–	–
Taunton,	34,259	–	–	–	–	–	–	–	1	1	–	–
Everett,	33,484	–	–	–	–	–	–	–	–	–	–	–
Quincy,	32,642	–	–	–	–	–	–	–	–	–	–	–
Chelsea,	32,452	–	–	–	–	–	–	–	2	–	–	–
Pittsfield,	32,121	–	–	–	–	–	–	–	–	–	–	–
Waltham,	27,834	–	–	–	–	–	–	–	1	–	–	–
Brookline,	27,792	–	–	–	–	–	–	–	–	–	–	–
Chicopee,	25,401	–	–	–	–	–	–	–	–	–	–	–
Gloucester,	24,398	–	–	–	–	–	–	–	–	–	–	–
Medford,	23,150	–	–	–	–	–	–	–	–	–	–	–
North Adams,	22,019	–	–	1	–	–	–	–	1	–	–	–
Northampton,	19,431	–	–	–	–	–	–	–	2	–	–	–
Beverly,	18,650	–	–	–	–	–	–	–	–	–	–	–
Revere,	18,219	–	–	–	–	–	–	–	–	–	–	–
Leominster,	17,580	–	–	–	–	–	–	–	–	–	–	–

Attleborough,	16,215	–	–	–	–	–	–	–	–	–	–	–
Westfield,	16,044	–	–	–	–	–	–	–	2[2]	1	–	–
Peabody,	15,721	–	–	–	–	–	–	–	–	–	1	–
Melrose,	15,715	–	–	–	–	–	–	–	–	–	–	–
Woburn,	15,308	–	–	–	–	–	–	–	–	–	1	–
Newburyport,	14,949	–	–	–	–	–	–	–	–	–	–	–
Gardner,	14,699	–	–	–	–	–	–	–	–	–	–	–
Marlborough,	14,579	–	–	–	–	–	–	–	–	–	–	–
Clinton,	13,075	–	–	–	–	–	–	–	1	–	–	–
Milford,	13,055	–	–	–	–	–	–	–	–	–	–	–
Adams,	13,026	–	–	–	–	–	–	–	–	–	–	–
Framingham,	12,948	–	–	–	–	–	–	–	–	–	–	–
Weymouth,	12,895	–	–	–	–	–	–	–	–	–	–	–
Watertown,	12,875	–	–	–	–	–	–	–	–	–	–	–
Southbridge,	12,592	–	–	–	–	–	–	–	–	–	–	–
Plymouth,	12,141	–	–	–	–	–	–	–	–	–	–	–
Webster,	11,509	–	–	–	–	–	–	–	–	–	–	–
Methuen,	11,448	–	–	–	–	–	–	–	–	–	–	–
Wakefield,	11,404	–	–	–	–	–	–	–	–	–	–	–
Arlington,	11,187	–	–	–	–	–	–	–	1	–	–	–
Greenfield,	10,427	–	–	–	–	–	–	–	–	–	–	–
Winthrop,	10,132	–	–	–	–	–	–	–	–	–	–	–
Total of reporting cities and towns of more than 10,000 population,	1,880,709	1	3	8	4	–	2	1	42	8	4	2
Montague,	6,866	–	–	–	–	–	–	–	1	–	–	–
Wellesley,	5,413	–	–	–	–	–	–	–	–	–	–	1
Wareham,	4,102	–	1	–	–	–	–	–	–	–	–	–
Manchester,	2,673	–	–	–	–	–	–	–	–	1	–	–
Tyringham,	382	–	–	–	–	–	–	–	1	–	–	–
Total of reporting towns of less than 10,000 population,	19,436	–	1	–	–	–	–	–	2	1	–	1

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[1] One nonresident.

[2] Two nonresidents.

Week ending Nov. 21, 1914.

CITIES AND TOWNS.	Population. Census for 1910.	Anterior Poliomyelitis.	Cerebro-spinal Meningitis.	Diphtheria.	Measles.	Pellagra.	Scarlet Fever.	Tetanus.	Tuberculosis, Pulmonary.	Tuberculosis, Other Forms.	Typhoid Fever.	Whooping Cough.
Boston,	686,092	–	2	7[1]	2	1	1	–	16[1]	3	2	–
Worcester,	145,986	–	–	1	–	–	–	–	3	1	–	–
Fall River,	119,295	–	–	–	–	–	–	–	–	–	–	–
Lowell,	106,294	–	–	1	–	–	–	–	–	1	–	–
Cambridge,	104,839	–	–	–	–	–	–	–	2	1	–	–
New Bedford,	96,652	–	–	–	–	–	2	–	–	–	–	–
Lynn,	89,336	–	–	–	–	–	–	–	4	1	–	–
Springfield,	88,926	–	–	–	–	–	–	–	–	–	1	1
Lawrence,	85,892	–	–	–	–	–	–	–	–	–	–	–
Somerville,	77,236	–	–	1	–	–	–	–	1	–	–	–
Holyoke,	57,730	–	–	–	–	–	–	–	2	–	–	–
Brockton,	56,878	–	–	–	–	–	–	–	–	–	–	–
Malden,	44,404	–	–	1	–	–	–	–	–	–	–	–
Haverhill,	44,115	–	–	–	–	–	–	–	–	–	–	–
Salem,	43,697	–	–	–	–	–	–	–	–	–	–	–
Newton,	39,806	–	–	–	–	–	–	–	–	–	–	–
Fitchburg,	37,826	–	–	–	–	–	–	–	–	–	1	–
Taunton,	34,259	–	–	–	–	–	–	–	–	–	–	–
Everett,	33,484	–	–	–	–	–	–	–	1	–	–	–
Quincy,	32,642	–	–	–	–	–	–	–	–	–	–	–
Chelsea,	32,452	–	–	–	–	–	–	–	–	–	–	–
Pittsfield,	32,121	–	–	–	–	–	–	–	–	–	–	–
Waltham,	27,834	–	–	–	–	–	–	–	2	–	–	–
Brookline,	27,792	–	–	–	–	–	–	–	–	–	–	–
Chicopee,	25,401	–	–	–	–	–	–	–	–	–	–	–
Gloucester,	24,398	–	–	–	–	–	–	–	–	–	–	–
Medford,	23,150	–	–	–	–	–	–	–	–	–	–	–
North Adams,	22,019	–	–	–	–	–	–	–	–	–	2	–
Northampton,	19,431	–	–	–	–	–	–	–	–	–	–	–
Beverly,	18,650	–	–	–	–	–	–	–	–	–	–	–
Revere,	18,219	–	–	–	–	–	–	–	–	–	–	–
Leominster,	17,580	–	–	1	–	–	–	–	–	–	1	–

Attleborough,	16,215	–	–	–	–	–	–	–	–	–	2	–
Westfield,	16,044	–	–	–	–	–	–	–	–	–	–	–
Peabody,	15,721	–	–	–	–	–	–	–	–	–	–	–
Melrose,	15,715	–	–	–	–	–	–	–	–	–	–	–
Woburn,	15,308	–	–	–	–	–	–	–	–	–	–	–
Newburyport,	14,949	–	–	–	–	–	–	–	–	–	–	–
Gardner,	14,699	–	–	–	–	–	–	–	–	–	–	–
Marlborough,	14,579	–	–	–	–	–	–	–	–	–	–	–
Clinton,	13,075	–	–	–	–	–	–	–	–	–	–	–
Milford,	13,055	–	–	–	–	–	–	–	–	–	–	–
Adams,	13,026	–	–	–	–	–	–	–	–	–	–	–
Framingham,	12,948	–	–	–	–	–	–	–	–	–	–	–
Weymouth,	12,895	–	–	–	–	–	–	–	–	–	–	–
Watertown,	12,875	–	–	–	–	–	–	–	–	–	–	–
Southbridge,	12,592	–	–	–	–	–	–	–	2	–	–	–
Plymouth,	12,141	–	–	–	–	–	–	–	–	–	–	–
Webster,	11,509	–	–	–	–	–	–	–	–	–	–	–
Methuen,	11,448	–	–	–	–	–	–	–	–	–	–	–
Wakefield,	11,404	–	1	–	–	–	–	–	–	–	–	–
Arlington,	11,187	–	–	–	–	–	–	–	–	–	–	–
Greenfield,	10,427	–	–	–	–	–	–	–	–	–	–	–
Winthrop,	10,132	–	–	–	–	–	–	–	–	–	–	–
Total of reporting cities and towns of more than 10,000 population,	1,776,449	–	3	12	2	1	3	–	33	7	9	1
Whitman,	7,292	–	–	–	–	–	–	–	1	–	–	–
Total of reporting towns of less than 10,000 population,	7,292	–	–	–	–	–	–	–	1	–	–	–

[1] One nonresident.

Week ending Nov. 28, 1914.

CITIES AND TOWNS.	Population. Census for 1910.	Anterior Poliomyelitis.	Cerebro-spinal Meningitis.	Diphtheria.	Measles.	Pellagra.	Scarlet Fever.	Tetanus.	Tuberculosis, Pulmonary.	Tuberculosis, Other Forms.	Typhoid Fever.	Whooping Cough.
Boston,	686,092	–	–	5	–	–	–	–	20[1]	2	4	1
Worcester,	145,986	–	–	–	–	–	–	–	5	–	–	1
Fall River,	119,295	–	–	–	–	–	–	–	4	–	–	–
Lowell,	106,294	–	–	–	–	–	–	–	1	–	–	–
Cambridge,	104,839	–	–	–	–	–	–	–	2	–	–	–
New Bedford,	96,652	–	–	1[2]	–	–	–	–	4	–	1	–
Lynn,	89,336	–	–	–	–	–	–	–	3	1	–	–
Springfield,	88,926	–	–	–	–	–	–	–	–	–	2	–
Lawrence,	85,892	–	–	–	–	–	–	–	–	–	–	–
Somerville,	77,236	–	–	1	–	–	–	–	1	–	–	–
Holyoke,	57,730	–	–	–	–	–	–	–	2	–	–	–
Brockton,	56,878	–	–	–	–	–	–	–	1	–	–	–
Malden,	44,404	–	–	1	–	–	–	–	1	–	–	–
Haverhill,	44,115	–	–	–	–	–	–	–	2	1	1	–
Salem,	43,697	–	–	–	–	–	–	–	–	–	–	–
Newton,	39,806	–	–	–	–	–	–	–	1	–	–	–
Fitchburg,	37,826	–	–	–	–	–	–	–	–	–	–	–
Taunton,	34,259	–	–	–	–	–	–	–	2	–	–	–
Everett,	33,484	–	–	–	–	–	–	–	–	–	–	–
Quincy,	32,642	–	–	–	–	–	–	–	–	–	–	–
Chelsea,	32,452	–	–	–	–	–	–	–	1	–	–	–
Pittsfield,	32,121	–	–	–	–	–	–	–	–	–	–	–
Waltham,	27,834	–	–	1	–	–	–	–	–	–	–	–
Brookline,	27,792	–	–	–	–	–	–	–	–	–	–	–
Chicopee,	25,401	–	–	2	–	–	–	–	2	–	–	–
Gloucester,	24,398	–	–	–	–	–	–	–	–	–	–	–
Medford,	23,150	–	–	–	–	–	–	–	–	–	–	–
North Adams,	22,019	–	–	–	–	–	–	–	–	–	1	–
Northampton,	19,431	–	–	–	–	–	–	–	1	–	–	–
Beverly,	18,650	–	–	–	–	–	–	–	–	–	–	–
Revere,	18,219	–	–	–	–	–	–	–	–	–	–	–
Leominster,	17,580	–	–	–	–	–	–	–	–	–	–	–

Attleborough,	16,215	–	–	–	–	–	–	–	–	–	–	–
Westfield,	16,044	–	–	–	–	–	–	–	2[1]	–	–	–
Peabody,	15,721	–	–	–	–	–	–	–	1	–	–	–
Melrose,	15,715	–	–	–	–	–	–	–	1	–	–	–
Woburn,	15,308	–	–	–	–	–	–	–	–	–	–	–
Newburyport,	14,949	–	–	–	–	–	–	–	–	–	–	–
Gardner,	14,699	–	–	–	–	–	–	–	–	–	–	–
Marlborough,	14,579	–	–	–	–	–	–	–	–	–	–	–
Clinton,	13,075	–	–	–	–	–	–	–	1	–	–	–
Milford,	13,055	–	–	–	–	–	–	–	–	–	–	–
Adams,	13,026	–	–	–	–	–	–	–	–	–	–	–
Framingham,	12,948	–	–	–	–	–	–	–	–	–	–	–
Weymouth,	12,895	–	–	–	–	–	–	–	–	–	–	–
Watertown,	12,875	–	–	–	–	–	–	–	–	–	–	–
Southbridge,	12,592	–	–	–	–	–	–	–	2	–	–	–
Plymouth,	12,141	–	–	–	–	–	–	–	–	–	–	–
Webster,	11,509	–	–	–	–	–	–	–	–	–	–	–
Methuen,	11,448	–	–	–	–	–	–	–	–	–	–	–
Wakefield,	11,404	–	–	–	–	–	–	–	–	–	–	–
Arlington,	11,187	–	–	–	–	–	–	–	–	–	–	–
Greenfield,	10,427	–	–	–	–	–	–	–	–	–	–	–
Winthrop,	10,132	–	–	–	–	–	–	–	–	–	–	–
Total of reporting cities and towns of more than 10,000 population,	1,992,132	–	–	11	–	–	–	–	60	4	9	2
Bridgewater,	7,688	–	–	–	–	–	–	–	–	1	–	–
Spencer,	6,740	–	–	–	–	–	–	–	–	1	–	–
Amherst,	5,112	–	–	–	–	–	–	–	–	–	–	1
Rockport,	4,211	–	–	–	–	–	–	–	1	–	–	–
Hopedale,	2,188	–	–	–	–	–	–	–	1	–	–	–
Raynham,	1,725	–	–	–	–	–	1	–	–	–	–	–
Total of reporting towns of less than 10,000 population,	27,664	–	–	–	–	–	1	–	2	2	–	1

---

[1] One nonresident.

[2] Vaginal diphtheria.

OPINION OF THE ATTORNEY-GENERAL RELATIVE TO EXTENSION OF TIME FOR GOODS HELD IN COLD STORAGE.

The Commonwealth of Massachusetts,
Department of the Attorney-General,
Boston, Nov. 14, 1914.

Dr. A. J. McLaughlin, *Commissioner of Health.*

Dear Sir: — You have requested my opinion upon the following question: After permission has been granted, under section 5 of chapter 652 of the Acts of 1912, to extend the period of cold storage for a particular consignment of goods beyond the period of twelve months, should I be justified in granting another extension for the same consignment of goods?

The section above referred to provides as follows: —

> No article of food shall be held in cold storage within this commonwealth for a longer period than twelve calendar months, except with the consent of the state board of health as hereinafter provided. The state board of health may, upon application, grant permission to extend the period of storage beyond twelve months for a particular consignment of goods, if the goods in question are found, upon examination, to be in proper condition for further storage at the end of twelve months. The length of time for which further storage is allowed shall be specified in the order granting the permission. A report on each case in which such extension of storage may be permitted, including information relating to the reason for the action of the board, the kind and the amount of goods for which the storage period was extended, and the length of time for which the continuance was granted, shall be included in the annual report of the board.

The principal purpose of the statute is to prevent the storage of articles of food for so long a period of time as to render them unfit for use, or until they have greatly deteriorated in food value. The statute provides for an examination of the goods at the expiration of the twelve months' period, and that if found in proper condition for further storage an extension of time may be allowed. The statute makes no provision for any further or other examination of goods nor for any further extension of time.

While it is a question not entirely free from difficulty, and while possibly a further extension might lawfully be granted, it is my opinion that the better practice will be to limit the extensions of time to the number evidently contemplated by the statute; that is, one examination and one extension of time only.

Very truly yours,

Thomas J. Boynton,
Attorney-General.

OPINION OF THE ATTORNEY-GENERAL RELATIVE TO LICENSING OF MILK DEALERS.

THE COMMONWEALTH OF MASSACHUSETTS,
DEPARTMENT OF THE ATTORNEY-GENERAL,
BOSTON, Dec. 9, 1914.

ALLAN J. McLAUGHLIN, M.D., *Commissioner of Health.*

DEAR SIR: — You have asked my opinion upon the following questions: —

(1) Is there any inconsistency between the provisions of chapter 443 of the Acts of 1909 and the provisions of chapter 744 of the Acts of 1914?

(2) As the law now stands is the milk dealer required to pay for his license?

(3) Are licenses to be issued and signed by the board of health or by the inspector of milk?

The provisions of chapter 443 of the Acts of 1909 that relate directly to your inquiries are contained in sections 1 and 3, which read as follows: —

> SECTION 1. No person, partnership or corporation, except a producer selling milk to other than consumers, or not to exceed twenty quarts per day to consumers, shall deliver, exchange, expose for sale or sell or have in his custody or possession with the intent to deliver, exchange, expose for sale or sell any milk, skimmed milk or cream in any city or town in which an inspector of milk is appointed, without obtaining from the inspector of milk of such city or town a license. The license shall contain the number thereof, the name, place of business, residence, number of carriages or other vehicles used by the licensee and the name of every driver or other person employed by him in carrying or selling milk. A license issued to a partnership or corporation shall be issued in the business name of said partnership or corporation and it shall contain the names in full of the partners and managers of said partnership or officers of said corporation. The license shall, for the purposes of this chapter, be conclusive evidence of ownership and shall not be sold, assigned or transferred. Whoever in such cities or towns engages himself or by his servant or agent in the business of selling milk, skimmed milk or cream from any carriage or other vehicle shall display conspicuously on the outer side of all carriages or other vehicles so used, the license number in figures not less than one and one half inches in height and the name and place of business of the licensee in gothic letters not less than one and one half inches in height. Whoever in such cities or towns engages himself or by his servant or agent in the business of selling milk, skimmed milk or cream in a store, booth, stand, or market place shall have his license conspicuously posted in such store, booth, stand or market place.
>
> . . . .
>
> SECTION 3. Inspectors of milk in any city or town may, for the purposes mentioned in the preceding sections, grant licenses, subject to the regulations established by the board of health of such city or town, to suitable persons, and shall receive for each license so granted a fee of fifty cents for the use of such city or town, and all license fees collected by him shall be paid over monthly to the city or town treasurer. Such licenses shall remain in force until the first day of June next following, unless previous to that time said license is suspended or revoked. Said inspector of milk may declare any license granted by him suspended or forfeited upon a conviction of the licensee in any court of this commonwealth, for violation of the terms of his license.

That part of chapter 744 of the Acts of 1914 that relates to the subject of your inquiries is found in sections 1 and 6, which provides as follows: —

> SECTION 1. It shall be unlawful for any producer of milk or dealer in milk to sell or deliver for sale in any city or town in the commonwealth any milk produced or dealt in by him without first obtaining from the board of health of such city or town a permit

authorizing such sale or delivery. Said boards of health are hereby authorized to issue such permits after an inspection, satisfactory to them, of the place in which and of the circumstances under which such milk is produced, has been made by them or by their authorized agent. Any permit so granted may contain such reasonable conditions as said board may think suitable for protecting the public health and may be revoked for failure to comply with any of such conditions. No charge shall be made to the producer for the permit or for the inspection of the dairy where the milk is produced.

. . . .

Section 6. It shall be the duty of the inspectors of milk appointed by the boards of health of cities and towns to enforce the provisions of section one, so far as relates to the milk supply of their respective cities and towns.

Chapter 744 of the Acts of 1914 was probably intended to apply to producers and wholesale dealers in milk. The language of section 1 of this chapter, as above quoted, is so broad, however, that it is impossible to limit its scope and confine its operation to producers and wholesalers. The language is: "It shall be unlawful for any producer of milk or dealer in milk to sell or deliver for sale . . . any milk produced or dealt in by him without first obtaining from the board of health of such city or town a permit authorizing such sale or delivery." One who sells milk to consumers is just as certainly a dealer in milk as one who produces or sells it in bulk, and so falls within the provisions of the statute requiring a permit from the board of health. This does not, however, conflict with the provisions of chapter 443 of the Acts of 1909, but simply imposes upon the dealer required to obtain a license under the act of 1909 the necessity of obtaining an additional license from the board of health. I therefore answer your first question in the negative.

As to your second question, it is apparent that chapter 744 of the Acts of 1914 expressly provides that no charge shall be made to the producer, and it is my opinion that no charge should be made to any dealer for a permit granted under the provisions of this act. The provisions of the act of 1909 in regard to payment of license fees remain unchanged, and persons who are subject to the provisions of this act are required to pay the same fee that was required before the enactment of chapter 744 of the Acts of 1914.

Referring to your third inquiry, I have to say that it is my opinion that a permit granted by a board of health under the provisions of chapter 744 of the Acts of 1914 should be signed by the board of health by which it is issued, and that a license issued by a milk inspector under chapter 443 of the Acts of 1909 should be signed by the inspector issuing the license.

Very truly yours,

Thomas J. Boynton,
Attorney-General.

PUBLIC HEALTH BULLETIN

ISSUED MONTHLY

BY THE

STATE DEPARTMENT OF HEALTH

OF MASSACHUSETTS

DECEMBER, 1914

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Approved by
The State Board of Publication.

PUBLIC HEALTH BULLETIN.

Allan J. McLaughlin, M.D., *Commissioner of Health.*

DISEASES DANGEROUS TO THE PUBLIC HEALTH.

The following circular, relative to diseases dangerous to the public health, was issued on Dec. 18, 1914, and a copy was sent to each physician in the Commonwealth: —

Office of the Commissioner of Health,
State House, Boston, Dec. 18, 1914.

On Dec. 15, 1914, the following diseases were declared by the State Department of Health to be *dangerous to the public health* and so reportable by law. Householders and physicians must now give immediate notice to the local board of health of all cases of: —

- Actinomycosis.
- Anterior poliomyelitis.
- Anthrax.
- Asiatic cholera.
- Cerebro-spinal meningitis.
- Chicken-pox.
- Diphtheria.
- Dog bite (requiring anti-rabic treatment).
- Dysentery: —
  - (*a*) Amebic.
  - (*b*) Bacillary.
- German measles.
- Glanders.
- Hookworm disease.
- Infectious diseases of the eye: —
  - (*a*) Ophthalmia neonatorum.
  - (*b*) Suppurative conjunctivitis.
  - (*c*) Trachoma.
- Leprosy.
- Malaria.
- Measles.
- Mumps.
- Pellagra.
- Plague.
- Rabies.
- Scarlet fever.
- Septic sore throat.
- Smallpox.
- Tetanus.
- Trichinosis.
- Tuberculosis (all forms).
- Typhoid fever.
- Typhus fever.
- Whooping cough.
- Yellow fever.

Your attention is called to the fact that in accordance with the provisions of chapter 670 of the Acts of 1913 notice of cases of any disease declared by the State Department of Health to be dangerous to the public health shall be given in such manner as the State Department of Health may deem advisable. On December 15 it was voted that such notice shall be given by physicians on postal cards supplied to physicians by the local board of health, with the complete list of such diseases printed thereon for their information.

Allan J. McLaughlin, M.D.,
Commissioner of Health.

A copy of the following circular, issued on Dec. 28, 1914, was sent to the local board of health of each city and town in the Commonwealth: —

MASSACHUSETTS STATE DEPARTMENT OF HEALTH,
BOSTON, Dec. 28, 1914.

To the Board of Health.

GENTLEMEN: — On Dec. 15, 1914, the State Department of Health declared the following list of diseases reportable as dangerous to the public health, under sections 49, 50 and 52 of chapter 75 of the Revised Laws, as amended by chapter 480 of the Acts of 1907. On Dec. 22, 1914, the State Department of Health declared this same list of diseases dangerous to the public health within the meaning of the provision of section 1 of chapter 213 of the Acts of 1902, as amended by section 1, chapter 386, Acts of 1907, and as further amended by chapter 380, Acts of 1909, which provides for the reimbursement by the State, through the State Board of Charity, for the expenses incurred by local boards of health for the care of persons ill with diseases dangerous to the public health within the meaning of said law.

Actinomycosis.
Anterior poliomyelitis.
Anthrax.
Asiatic cholera.
Cerebro-spinal meningitis.
Chicken-pox.
Diphtheria.
Dog bite (requiring anti-rabic treatment).
Dysentery: —
  (*a*) Amebic.
  (*b*) Bacillary.
German measles.
Glanders.
Hookworm disease.
Infectious diseases of the eye: —
  (*a*) Ophthalmia neonatorum.
  (*b*) Suppurative conjunctivitis.
  (*c*) Trachoma.
Leprosy.
Malaria.
Measles.
Mumps.
Pellagra.
Plague.
Rabies.
Scarlet fever.
Septic sore throat.
Smallpox.
Tetanus.
Trichinosis.
Tuberculosis (all forms).
Typhoid fever.
Typhus fever.
Whooping cough.
Yellow fever.

Your attention is called to the fact that in accordance with the provisions of chapter 670 of the Acts of 1913, notice of cases of any disease declared by the State Department of Health to be dangerous to the public health shall be given in such manner as the State Department of Health may deem advisable. On December 15 it was voted that notice shall be given by physicians on postal cards supplied to physicians by the local board of health, with the complete list of such diseases printed thereon for their information.

For the information and convenience of physicians, therefore, will you be good enough to cause to be printed on the postal cards that you furnish them for the notification of the reportable diseases the complete list of the diseases mentioned in this letter. It is suggested that the list may be printed in fine type at the bottom of the blank side of the postal card or on the left portion of the address side.

Yours very truly,

ALLAN J. McLAUGHLIN, M.D.,
Commissioner of Health.

FOOD AND DRUGS.

The following tables present the results of the laboratory examinations of samples of food and drugs collected during the month of December, 1914: —

The cities and towns in which samples were collected were: Ashby, Attleborough, Billerica, Boston, Brockton, Brookline, Cambridge, Chelsea, Clinton, Danvers, Dracut, Everett, Fall River, Fitchburg, Framingham, Haverhill, Hingham, Lawrence, Lexington, Lowell, Lynn, Medford, Melrose, Millbury, New Bedford, North Brookfield, Norwood, Peabody, Quincy, Revere, Salem, Stoneham, Wakefield, Waltham, Westfield, Winchester, Woburn and Worcester.

SUMMARY OF ANALYSES.

ARTICLES EXAMINED.	Number found to be of Good Quality.	Number adulterated or varying from the Legal Standard.	Total.
Butter,	2	–	2
Cheese,	1	–	1
Cider,	–	3	3
Cocoa,	13	–	13
Cream,	18	1	19
Cream of tartar,	3	–	3
Drugs,	81	23	104
Eggs,	3	–	3
Honey,	–	1	1
Ice cream,	2	–	2
Jams and jellies,	1	–	1
Lard,	5	4	9
Maple syrup,	–	1	1
Meat products: —			
Hamburg steak,	5	–	5
Mince meat,	2	–	2
Sausages,	17	27	44
Turkeys,[1]	–	5	5
Milk,	256	62	318
Molasses,	1	3	4
Olive oil,	2	–	2
Shrimp,	1	4	5
Spices,	7	–	7
Vinegar,	–	3	3
Totals,	420	137	557

[1] Taken from cold storage.

PROSECUTIONS FOR VIOLATIONS OF THE LAW RELATING TO FOOD AND DRUGS.

Nineteen convictions were secured during the month of December, 1914, for the sale of adulterated food, and for violation of the cold-storage laws, as follows: —

NAME OF DEFENDANT.	Address.	Character of Article sold or Nature of Offence.
Karl Furmanick,	Sterling,	Milk (total solids, 10.22).[1]
John Hennessey,	Ashby,	Milk (total solids, 10.26).[1]
Sirkis Kashanian,	West Andover,	Milk (total solids, 11.18).[1]
John Petitt,	No. Attleborough,	Milk (contained formaldehyde).[2]
Peter C. Schmidt,	Charlestown,	Milk (total solids, 10.58).[2, 3]
John Strniste,	Westfield,	Milk (total solids, 11.34).[3]
John Strniste,	Westfield,	Milk (total solids, 11.26).
Hubert J. Feilteau,	Lynn,	Cold storage eggs (not properly marked).
Thomas Fee,	Lynn,	Cold storage eggs (not properly marked).
Matthias Clayton,	Lawrence,	Cold storage eggs (not properly marked).
Giovanni Guiffrida,	Lawrence,	Cold storage eggs (not properly marked).
Rosario Misita,	Lawrence,	Cold storage eggs (not properly marked).
Angelo Maglia,	Lawrence,	Cold storage eggs (not properly marked).
Prospero Cascio,	Lawrence,	Cold storage eggs (not properly marked).
Giovanni Faro,	Lawrence,	Cold storage eggs (not properly marked).
Pietro Angelico,	Lawrence,	Cold storage eggs (not properly marked).
Louis Kimmel,	Lynn,	Cold storage sign not displayed.
Matthias Clayton,	Lawrence,	Cold storage sign not displayed.
F. Goodman,	Lawrence,	Cold storage sign not displayed.

[1] Watered. [2] Appealed. [3] Skimmed.

Fines imposed, $415.

SLAUGHTERING AND MEAT INSPECTION.

During the month of December, 1914, the following confiscations were made: —

Date.	ARTICLES.	Weight (Pounds).	Reasons.	Disposition.
Dec. 4, 1914	Pork,	185	Tainted,	Buried.
Dec. 22, 1914	Veal,	30	Immature,	Rendered.

COLD STORAGE OF FOOD.

Articles in Cold Storage condemned upon Physical and Chemical Examinations as unfit for Food.

Date.	ARTICLES.	Weight (Pounds).	Reasons.	Disposition.
Dec. 3, 1914	Haddock, .	464	Decomposed, dried and soiled,	Rendered.
Dec. 5, 1914	Turkeys, .	26	Tainted, ...	Incinerated.
Dec. 7, 1914	Chickens, .	65	Decomposed, . . .	Incinerated.
Dec. 12, 1914	Fowl, . .	28	Decomposed, . . .	Incinerated.
Dec. 14, 1914	Turkeys, .	234	Decomposed, . . .	Rendered.
Dec. 14, 1914	Turkeys, .	173	Decomposed, . . .	Rendered.
Dec. 14, 1914	Turkeys, .	196	Decomposed, . . .	Rendered.
Dec. 14, 1914	Turkeys, .	220	Decomposed, . . .	Rendered.
Dec. 14, 1914	Turkeys, .	237	Decomposed, . . .	Rendered.
Dec. 29, 1914	Pork trimmings,	727	Decomposed, . . .	Rendered.
Total, .	. . . .	2,370		

SAMPLES OF FOOD WHICH UPON EXAMINATION WERE FOUND TO BE ADULTERATED.

CIDER.

Contained Benzoic Acid.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
9453-S	M. A. Boynton, Wollaston.	

Contained Salicylic Acid.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
9447-S	John G. Salchow, Wollaston.	
9441-S	Snowden's Market, Wollaston.	

HONEY.

Contained 80 Per Cent. Glucose.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
9493-S	183 North Street, Boston.	

LARD.

Compound: not marked as such.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
9291-S	Gavin Brothers, Woburn.	
9315-S	Gavin Brothers, Stoneham.	
9381-S	Gavin Brothers, Woburn.	
9317-S	M. O'Keefe, Stoneham.	

MAPLE SYRUP.

Contained 85 Per Cent. Cane Sugar.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
9517-S	Allen, Slade Company, Fall River, . . .	Golden Tree.

SAMPLES OF FOOD WHICH UPON EXAMINATION WERE FOUND TO BE ADULTERATED — *Continued.*

MOLASSES.

Contained 27 Per Cent. Glucose.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
q 14974	Atlantic & Pacific Tea Company, Dorchester,	Vesmar. Dunbar Molasses and Syrup Company, New Orleans, La.

Contained 48 Per Cent. Glucose.

q 15048	Atlantic & Pacific Tea Company, Dorchester,	B. & O.

Contained 45 Per Cent. Glucose.

q 15116	Atlantic & Pacific Tea Company, Fitchburg,	B. & O.

SAUSAGES.

Contained more than 2 Per Cent. Starch.

9485–S	Frederick Baldau, Boston,	Frederick Baldau, Boston.
9487–S	Frederick Baldau, Boston,	Frederick Baldau, Boston.
q 15016	J. B. Blood, Lynn.	
9589–S	Brockton Sausage Company, Brockton.	
9465–S	W. Fred Butler & Co., Haverhill,	Own make.
q 15014	City Cash Market, Lynn.	
9393–S	C. R. Drew, Medford.	
26323	Grocery Store, 57A Union Street, Lawrence.	
26300	Independent Sausage Manufacturing Company, Brockton.	
34–S	Janes Brothers, Waltham.	
9159–S	Knight & Co., Boston,	Parks Sausage and Provision Company.
9161–S	Knight & Co., Boston,	Parks Sausage and Provision Company.
26212	Lawrence Public Market, Lawrence.	
26213	Lawrence Public Market, Lawrence.	
9463–S	Merrimac Street, Haverhill.	
26301	Mohican Company, Brockton.	
26302	Mohican Company, Brockton.	
26215	Parker's Pork Store, Lawrence.	
38–S	Parks Sausage and Provision Company, Boston.	
40–S	Parks Sausage and Provision Company, Boston.	
26221	Provision store, 210 Union Street, Lawrence.	
9585–S	Public Market, Brockton,	Brockton Sausage Company.
9205–S	Spot Cash Market, Clinton,	Darling, Worcester.
9587–S	The Shaw Company, Brockton,	Brockton Sausage Company.
q 15010	Washington Cash Market, Lynn.	
q 15011	Washington Cash Market, Lynn.	
9157–S	Washington Public Market, Newton,	Baldau, Boston.

Contained Coloring Matter.

9589–S	Brockton Sausage Company, Brockton.	
26323	Grocery Store, 75A Union Street, Lawrence.	
26300	Independent Sausage Manufacturing Company, Brockton.	
26301	Mohican Company, Brockton.	
9585–S	Public Market, Brockton,	Brockton Sausage Company.
9587–S	The Shaw Company, Brockton,	Brockton Sausage Company.

SAMPLES OF FOOD WHICH UPON EXAMINATION WERE FOUND TO BE ADULTERATED — *Concluded.*

SHRIMP.

Contained Borax.

Number of Sample.	DEALER.	Brand, Wholesaler or Manufacturer.
9559–S	Whitman, Weed & Lee, Boston, ...	Whitman, Weed & Lee, Boston.
9355–S	Whitman, Weed & Lee, Boston, ...	Whitman, Weed & Lee, Boston.
9461–S	Whitman, Weed & Lee, Boston, ...	Whitman, Weed & Lee, Boston.
9483–S	H. A. Rich Company, Boston, ...	H. A. Rich Company, Boston.

CIDER VINEGAR.

Low in Acid (3.46 Per Cent.).

25205	Tarvis, New Bedford, ...	Battey's.

SAMPLES OF DRUGS WHICH UPON EXAMINATION WERE FOUND TO BE ADULTERATED.

DENATURED ALCOHOL (POISON LABEL TOO SMALL).

Number of Sample.	DEALER.	Wholesaler or Manufacturer.	Per Cent. of Required Strength.
9555–S	Almy, Bigelow & Washburn, Salem, . .	– –	–

BLUE OINTMENT.

9724–R	Goodale's Drug Store, Lowell, ...	– –	16

SPIRIT OF CAMPHOR.

q 14970	G. E. Judson, Westfield, ...	– –	65

SPIRIT OF NITROUS ETHER.

26189	Brailey & Dickson, New Bedford, . . .	Davis & Hatch Spice Company, New Bedford.	7.5
9173–S	Henry A. Burdett, Clinton, ...		81.0
9523–S	Cook Chemical Company, Fall River, . .	– –	72.0
9475–S	Albert M. Crafts, Haverhill, ...	– –	81.0
9471–S	George E. Crane, Haverhill, ...	– –	79.0
25684	A. Dolan, Natick, ...	– –	14.0
9545–S	Liggett's, Salem, ...	– –	67.0
9169–S	Raynsford, Clinton, ...	– –	64.0
q 15114	Raynsford, Clinton, ...	– –	67.0
9439–S	Charles A. Southworth, Hingham, . . .	– –	77.0
9527–S	R. E. Walsh, Fall River, ...	– –	64.0

SPIRIT OF PEPPERMINT.

26226	Codman Square Pharmacy, Dorchester, . .	– –	80
26281	C. Leibella & Co., Boston, ...	– –	24
9519–S	St. George's Pharmacy, Fall River, . . .	– –	20

SAMPLES OF DRUGS WHICH UPON EXAMINATION WERE FOUND TO BE ADULTERATED — *Concluded.*

TINCTURE OF IODINE.

Number of Sample.	DEALER.	Wholesaler or Manufacturer.	Per Cent. of Required Strength.
q 15051	Franklin Pharmacy, Roxbury, ...	– –	84.5
9175-S	A. T. Frost, Clinton, ...	– –	42.0
q 15113	A. T. Frost, Clinton, ...	– –	68.0
26282	C. Leibella & Co., Boston, ...	– –	81.0

SAMPLES OF MILK WHICH UPON EXAMINATION WERE FOUND TO BE ADULTERATED.

Number of Sample.	Name of Dealer, Wholesaler or Producer.	Results of Analyses.
26242	Daniel E. Cameron, Dracut, ...	Total solids, 11.16 per cent.; fat, 3.30 per cent.; contained added water.
26243	Daniel E. Cameron, Dracut, ...	Total solids, 11.32 per cent.; fat, 3.40 per cent.; contained added water.
26244	Daniel E. Cameron, Dracut, ...	Total solids, 11.38 per cent.; fat, 3.60 per cent.; contained added water.
26245	Daniel E. Cameron, Dracut, ...	Total solids, 11.48 per cent.; fat, 3.60 per cent.; contained added water.
26246	Daniel E. Cameron, Dracut, ...	Total solids, 11.50 per cent.; fat, 3.40 per cent.; contained added water.
26247	Daniel E. Cameron, Dracut, ...	Total solids, 11.24 per cent.; fat, 3.20 per cent.; contained added water.
26248	Daniel E. Cameron, Dracut, ...	Total solids, 11.32 per cent.; fat, 3.25 per cent.; contained added water.
26249	Daniel E. Cameron, Dracut, ...	Total solids, 11.20 per cent.; fat, 3.40 per cent.; contained added water.
26250	Daniel E. Cameron, Dracut, ...	Total solids, 11.46 per cent.; fat, 3.40 per cent.: contained added water.
26251	Daniel E. Cameron, Dracut, ...	Total solids, 11.54 per cent.; fat, 3.40 per cent.; contained added water.
26252	Daniel E. Cameron, Dracut, ...	Total solids, 11.10 per cent.; fat, 3.40 per cent.; contained added water.
26253	Daniel E. Cameron, Dracut, ...	Total solids, 11.16 per cent.; fat, 3.40 per cent.; contained added water.
26254	Daniel E. Cameron, Dracut, ...	Total solids, 11.36 per cent.; fat, 3.40 per cent.; contained added water.
q 15098	John Hennessey, Ashby, ...	Total solids, 11.30 per cent.; fat, 3.75 per cent.; contained added water.
q 15099	John Hennessey, Ashby, ...	Total solids, 10.78 per cent.; fat, 3.70 per cent.; contained added water.
q 15100	John Hennessey, Ashby, ...	Total solids, 10.26 per cent.; fat, 3.50 per cent.; contained added water.
q 15093	Herman Lahti, Ashby, ...	Total solids, 11.82 per cent.; fat, 3.90 per cent.; contained added water.
q 15094	Herman Lahti, Ashby, ...	Total solids, 12.24 per cent.; fat, 4.30 per cent.; contained added water.
q 15095	Herman Lahti, Ashby, ...	Total solids, 11.68 per cent.; fat, 4.30 per cent.; contained added water.
q 15096	Herman Lahti, Ashby, ...	Total solids, 11.74 per cent.; fat, 4.10 per cent.; contained added water.
q 15097	Herman Lahti, Ashby, ...	Total solids, 11.28 per cent.; fat, 3.30 per cent.; contained added water.
q 15073	E. E. Pierce, Brookline, ...	Total solids, 11.68 per cent.; fat, 2.65 per cent.; proteins, 3.20 per cent.; skimmed milk.

REPORT ON INSPECTION OF DAIRIES.

Owing to the continuance of the outbreak of foot and mouth disease among cattle in a number of towns in the State, the regular inspection of dairies was not resumed during the month of December, 1914.

RETURNS OF DISEASES.

Cases of Diseases declared by the State Department of Health to be Dangerous to the Public Health.

[Under the provisions of section 52 of chapter 75 of the Revised Laws.]

DISEASE.	Week ending —				
	Dec. 5.	Dec. 12.	Dec. 19.	Dec. 26.	Total.
Anterior poliomyelitis,	2	3	1	–	6
Anthrax,	1	1	–	–	2
Cerebro-spinal meningitis,	4	3	1	3	11
Chicken-pox,	250	201	202	125	778
Diphtheria,	229	227	242	185	883
Dog bite,	–	2	2	–	4
German measles,	–	1	2	–	3
Glanders,	–	–	–	1	1
Malaria,	1	1	–	–	2
Measles,	292	236	215	156	899
Mumps,	24	17	19	20	80
Ophthalmia neonatorum,	54	40	71	44	209
Scarlet fever,	175	185	180	136	676
Septic sore throat,	5	8	3	4	20
Smallpox,	–	1	–	–	1
Suppurative conjunctivitis,	1	–	–	–	1
Tetanus,	–	1	–	2	3
Trachoma,	1	–	–	–	1
Tuberculosis, pulmonary,	159	132	131	100	522
Tuberculosis, other forms,	9	4	2	4	19
Tuberculous meningitis,	1	2	–	2	5
Typhoid fever,	59	46	43	27	175
Whooping cough,	62	53	71	56	242

RETURNS OF DEATHS.

WEEKLY RETURNS OF DEATHS FROM DISEASES DECLARED BY THE STATE DEPARTMENT OF HEALTH TO BE DANGEROUS TO THE PUBLIC HEALTH IN CITIES AND TOWNS IN MASSACHUSETTS.

[Under the provisions of chapter 210, Acts of 1913.]

Week ending Dec. 5, 1914.

CITIES AND TOWNS.	Population. Census for 1910.	Anterior Poliomyelitis.	Cerebro-spinal Meningitis.	Chicken-pox.	Diphtheria.	Glanders.	Measles.	Scarlet Fever.	Septic Sore Throat.	Tetanus.	Tuberculosis, Pulmonary.	Tuberculosis, Other Forms.	Typhoid Fever.	Whooping Cough.
Boston,	686,092	–	2	–	6	–	3	1	–	–	23[1]	3[2]	1	1
Worcester,	145,986	–	–	–	1	–	–	–	–	–	5	–	–	–
Fall River,	119,295	–	–	–	–	–	–	–	–	–	4	2	–	–
Lowell,	106,294	–	–	–	1	–	–	–	–	–	2	1	–	1
Cambridge,	104,839	–	–	–	–	–	–	–	–	–	5	–	–	–
New Bedford,	96,652	–	–	–	1	–	–	1	–	–	3	–	–	–
Lynn,	89,336	–	–	–	–	–	–	–	–	–	1	–	–	–
Springfield,	88,926	–	–	–	–	–	–	–	–	–	3	1	–	–
Lawrence,	85,892	–	–	–	–	–	–	–	–	–	–	–	–	–
Somerville,	77,236	–	1	–	–	–	–	1	–	–	3	1	1	–
Holyoke,	57,730	–	–	–	3	–	–	–	–	–	–	–	–	–
Brockton,	56,878	–	–	–	–	–	–	–	–	–	4	–	–	–
Malden,	44,404	–	–	–	2	–	–	–	–	–	1	–	–	–
Haverhill,	44,115	1	–	3	–	–	–	4	–	–	2	–	–	–
Salem,	43,697	–	–	–	–	–	–	–	–	–	–	–	–	–
Newton,	39,806	–	–	–	–	–	–	–	–	–	–	–	–	–
Fitchburg,	37,826	–	–	–	–	–	–	–	–	–	1	–	–	–
Taunton,	34,259	–	–	–	–	–	–	–	–	–	–	–	–	–
Everett,	33,484	–	–	–	–	–	–	–	–	–	3	–	–	–
Quincy,	32,642	–	–	–	–	–	–	–	–	–	–	–	–	–
Chelsea,	32,452	–	–	–	–	–	–	–	–	–	1	–	1	–

Pittsfield,	32,121	–	–	–	–	–	–	–	–	–	–	–	–	–
Waltham,	27,834	–	–	–	–	–	–	–	–	–	–	2	–	–
Brookline,	27,792	–	–	–	–	–	–	–	–	–	–	–	–	–
Chicopee,	25,401	–	–	–	–	–	–	–	–	–	2	–	–	–
Gloucester,	24,398	–	–	–	–	–	–	–	–	–	–	–	–	–
Medford,	23,150	–	–	–	–	–	–	–	–	–	1	–	–	–
North Adams,	22,019	–	–	–	–	–	–	–	–	–	–	–	–	–
Northampton,	19,431	–	–	–	–	–	–	–	–	–	–	–	–	–
Beverly,	18,650	–	–	–	–	–	–	–	–	–	–	–	–	–
Revere,	18,219	–	–	–	–	–	–	–	–	–	–	–	–	–
Leominster,	17,580	–	–	–	–	–	–	–	–	–	–	–	–	–
Attleborough,	16,215	–	–	–	–	–	–	–	–	–	–	–	–	–
Westfield,	16,044	–	–	–	–	–	–	–	–	–	1[2]	–	–	–
Peabody,	15,721	–	–	–	–	–	–	–	–	–	–	–	–	–
Melrose,	15,715	–	–	–	–	–	–	–	–	–	–	–	–	–
Woburn,	15,308	–	–	–	–	–	–	–	–	–	–	–	–	–
Newburyport,	14,949	–	–	–	–	–	–	–	–	–	–	–	–	–
Gardner,	14,699	–	–	–	–	–	–	–	–	–	–	–	–	–
Marlborough,	14,579	–	–	–	–	–	–	–	–	–	–	–	–	–
Clinton,	13,075	–	–	–	–	–	–	–	–	–	–	–	–	–
Milford,	13,055	–	–	–	–	–	–	–	–	–	–	–	–	–
Adams,	13,026	–	–	–	–	–	–	–	–	–	–	–	–	–
Framingham,	12,948	1	–	–	–	–	–	–	–	–	1	–	–	–
Weymouth,	12,895	–	–	–	–	–	–	–	–	–	–	–	–	–
Watertown,	12,875	–	–	–	–	–	–	–	–	–	–	–	–	–
Southbridge,	12,592	–	–	–	–	–	–	–	–	–	1	–	–	–
Plymouth,	12,141	–	–	–	–	–	–	–	–	–	–	–	–	–
Webster,	11,509	–	–	–	–	–	–	–	–	–	–	–	–	–
Methuen,	11,448	–	–	–	–	–	–	–	–	–	–	–	–	–
Wakefield,	11,404	–	–	–	–	–	–	–	–	–	–	–	–	–
Arlington,	11,187	–	–	–	–	–	–	–	–	–	–	–	–	–
Greenfield,	10,427	–	–	–	–	–	–	–	–	–	–	–	–	–
Winthrop,	10,132	–	–	–	–	–	–	–	–	–	–	–	–	–
Total of reporting cities and towns of more than 10,000 population,	1,939,514	2	3	3	14	–	3	7	–	–	67	10	3	2
Saugus,	8,047	–	–	–	–	–	–	–	–	–	1	–	–	–
Douglas,	2,152	–	–	–	–	–	–	1	–	–	–	–	–	–
Oak Bluffs,	1,084	–	–	–	–	–	–	1	–	–	–	–	–	–
Total of reporting towns of less than 10,000 population,	11,283	–	–	–	–	–	–	2	–	–	1	–	–	–

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[1] Three nonresidents.

[2] One nonresident.

Week ending Dec. 12, 1914.

CITIES AND TOWNS.	Population. Census for 1910.	Anterior Poliomyelitis.	Cerebro-spinal Meningitis.	Chicken-pox.	Diphtheria.	Glanders.	Measles.	Scarlet Fever.	Septic Sore Throat.	Tetanus.	Tuberculosis, Pulmonary.	Tuberculosis, Other Forms.	Typhoid Fever.	Whooping Cough.
Boston,	686,092	-	-	-	5	-	4	1	-	-	22[1]	2	2	2
Worcester,	145,986	-	-	-	1	-	-	-	-	-	2	-	-	-
Fall River,	119,295	-	-	-	-	-	-	-	-	-	2	-	-	-
Lowell,	106,294	-	-	-	1	-	-	-	-	-	3	-	-	-
Cambridge,	104,839	-	-	-	1	-	-	-	-	-	2	-	-	-
New Bedford,	96,652	-	-	-	1	-	1	-	-	-	2	-	-	-
Lynn,	89,336	-	-	-	1	-	-	-	-	-	-	2	-	-
Springfield,	88,926	-	-	-	-	-	-	-	-	-	-	-	-	-
Lawrence,	85,892	-	-	-	-	-	-	-	-	-	-	-	-	-
Somerville,	77,236	-	-	-	1	-	-	-	-	-	2	1	-	-
Holyoke,	57,730	-	-	-	1	-	-	-	-	-	-	1	-	-
Brockton,	56,878	-	-	-	-	-	-	-	-	-	-	-	-	-
Malden,	44,404	-	-	-	1	-	-	-	-	-	-	-	-	-
Haverhill,	44,115	-	-	-	-	-	-	-	-	-	1	-	-	-
Salem,	43,697	-	-	-	-	-	-	-	-	-	-	-	-	-
Newton,	39,806	-	-	-	-	-	-	-	-	-	-	-	-	-
Fitchburg,	37,826	-	-	-	-	-	-	-	-	-	1	-	-	-
Taunton,	34,259	-	-	-	-	-	-	-	-	-	1	1	1	-
Everett,	33,484	-	1	-	-	-	-	-	-	-	-	-	-	-
Quincy,	32,642	-	-	-	-	-	-	-	-	-	-	-	-	-
Chelsea,	32,452	-	-	-	-	-	-	-	-	-	-	-	-	-
Pittsfield,	32,121	-	-	-	-	-	-	-	-	-	-	-	-	-
Waltham,	27,834	-	1	-	-	-	-	-	-	-	1	-	-	-
Brookline,	27,792	-	-	-	-	-	-	-	-	-	-	-	-	-
Chicopee,	25,401	-	-	-	-	-	-	-	-	-	-	-	-	-
Gloucester,	24,398	-	-	-	-	-	-	-	-	-	-	-	-	-
Medford,	23,150	-	-	-	-	-	-	-	-	-	-	-	-	-
North Adams,	22,019	-	-	-	-	-	-	-	-	-	-	-	1	-
Northampton,	19,431	-	-	-	-	-	-	-	-	-	-	-	-	-
Beverly,	18,650	-	-	-	1	-	-	-	-	-	-	1	1	-
Revere,	18,219	-	-	-	-	-	-	-	-	-	-	-	-	-
Leominster,	17,580	-	-	-	-	-	-	-	-	-	-	-	-	-

Attleborough,	16,215	-	-	-	-	-	-	-	-	-	-	-	-	-
Westfield,	16,044	-	-	-	-	-	-	-	-	-	-	-	-	-
Peabody,	15,721	-	-	-	1	-	-	-	-	-	-	-	-	-
Melrose,	15,715	-	-	-	-	-	-	-	-	-	-	-	-	-
Woburn,	15,308	-	-	-	-	-	-	-	-	-	-	-	-	-
Newburyport,	14,949	-	-	-	1	-	-	-	-	-	-	-	-	-
Gardner,	14,699	-	-	-	-	-	-	-	-	-	-	-	-	-
Marlborough,	14,579	-	-	-	-	-	-	-	-	-	-	-	-	-
Clinton,	13,075	-	-	-	-	-	-	-	-	-	-	-	-	-
Milford,	13,055	-	-	-	-	-	-	-	-	-	-	-	-	-
Adams,	13,026	-	-	-	1	-	-	-	-	-	1	-	-	-
Framingham,	12,948	-	-	-	-	-	-	-	-	-	-	-	-	-
Weymouth,	12,895	-	-	-	-	-	-	-	-	-	-	-	-	-
Watertown,	12,875	-	-	-	-	-	-	-	-	-	-	-	-	-
Southbridge,	12,592	-	-	-	-	-	-	-	-	-	-	-	-	-
Plymouth,	12,141	-	-	-	-	-	-	-	-	-	-	-	-	-
Webster,	11,509	-	-	-	-	-	-	-	-	-	-	-	-	-
Methuen,	11,448	-	-	-	-	-	-	-	-	-	-	-	-	-
Wakefield,	11,404	-	-	-	-	-	-	-	-	-	-	-	-	-
Arlington,	11,187	-	-	-	-	-	-	-	-	-	-	-	-	-
Greenfield,	10,427	-	-	-	-	-	-	-	-	-	-	-	-	-
Winthrop,	10,132	-	-	-	-	-	-	-	-	-	-	-	-	-
Total of reporting cities and towns of more than 10,000 population,	1,789,744	-	2	-	17	-	5	1	-	-	40	8	5	2
Montague,	6,866	-	-	-	-	-	-	-	-	-	1	-	-	-
Pepperell,	2,953	-	-	-	1	-	-	-	-	-	-	-	-	-
Total of reporting towns of less than 10,000 population,	9,819	-	-	-	1	-	-	-	-	-	1	-	-	-

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[1] Two nonresidents.

Week ending Dec. 19, 1914.

CITIES AND TOWNS.	Population. Census for 1910.	Anterior Poliomyelitis.	Cerebro-spinal Meningitis.	Chicken-pox.	Diphtheria.	Glanders.	Measles.	Scarlet Fever.	Septic Sore Throat.	Tetanus.	Tuberculosis, Pulmonary.	Tuberculosis, Other Forms.	Typhoid Fever.	Whooping Cough.
Boston,	686,092	–	1	–	4	–	1	3	–	–	24[1]	1	1	2
Worcester,	145,986	–	–	–	–	–	–	–	–	–	1	–	–	–
Fall River,	119,295	–	–	–	–	–	–	–	–	–	–	–	–	–
Lowell,	106,294	–	–	–	1	–	–	–	–	–	2	–	–	–
Cambridge,	104,839	–	–	–	–	–	1	–	–	–	6	1	–	–
New Bedford,	96,652	–	–	–	–	–	–	–	–	–	2	–	1	–
Lynn,	89,336	–	–	–	–	–	–	–	–	–	2	–	1	–
Springfield,	88,926	1	–	–	–	–	–	–	–	–	3	–	–	–
Lawrence,	85,892	–	–	–	–	–	–	–	–	–	–	–	–	–
Somerville,	77,236	–	–	–	1	–	–	–	–	–	3	–	–	–
Holyoke,	57,730	–	–	–	–	–	–	–	–	–	–	1	–	–
Brockton,	56,878	–	–	–	3	–	–	–	–	–	1	–	–	–
Malden,	44,404	–	–	–	1	–	–	–	–	–	–	1	–	–
Haverhill,	44,115	–	–	3	–	–	3	1	1	–	–	–	1	–
Salem,	43,697	–	–	–	–	–	–	–	–	–	–	–	–	–
Newton,	39,806	–	–	–	–	–	–	–	–	–	1	–	–	–
Fitchburg,	37,826	–	–	–	2	–	–	–	–	–	1	–	–	–
Taunton,	34,259	–	–	–	–	–	–	–	–	–	1	–	–	–
Everett,	33,484	–	–	–	–	–	–	–	–	–	–	–	–	–
Quincy,	32,642	–	–	–	–	–	–	–	–	–	–	–	–	–
Chelsea,	32,452	–	–	–	–	–	–	–	–	–	1	–	–	–
Pittsfield,	32,121	–	–	–	–	–	–	–	–	–	–	–	–	–
Waltham,	27,834	–	–	–	–	–	–	–	–	–	–	–	–	–
Brookline,	27,792	–	–	–	–	–	–	–	–	–	–	–	–	–
Chicopee,	25,401	–	–	–	1	–	–	–	–	–	1	–	–	–
Gloucester,	24,398	–	–	–	–	–	–	–	–	–	–	–	–	–
Medford,	23,150	–	–	–	1	–	–	–	–	–	–	–	–	–
North Adams,	22,019	–	–	–	–	–	–	–	–	–	1	–	1	–
Northampton,	19,431	–	–	–	–	–	–	–	–	–	–	–	–	–
Beverly,	18,650	–	–	–	–	–	–	–	–	–	–	–	–	–
Revere,	18,219	–	–	–	–	–	–	–	–	–	–	–	–	–
Leominster,	17,580	–	–	–	–	–	–	–	–	–	–	–	–	–

Attleborough,	16,215	–	–	–	–	–	–	–	–	–	–	–	–	–
Westfield,	16,044	–	–	–	–	–	–	–	–	–	3[1]	–	–	–
Peabody,	15,721	–	–	–	–	–	–	–	–	–	–	–	–	–
Melrose,	15,715	–	–	–	–	–	–	–	–	–	–	–	–	–
Woburn,	15,308	–	–	–	–	–	–	–	–	–	–	–	–	–
Newburyport,	14,949	–	–	–	–	–	–	–	–	–	–	–	–	–
Gardner,	14,699	–	–	–	–	–	–	–	–	–	–	–	–	–
Marlborough,	14,579	–	–	–	–	–	–	–	–	–	–	–	–	–
Clinton,	13,075	–	–	–	–	–	–	–	–	–	–	–	–	–
Milford,	13,055	–	–	–	–	–	–	–	–	–	–	–	–	–
Adams,	13,026	–	–	–	–	–	–	–	–	–	–	–	–	–
Framingham,	12,948	–	–	–	–	–	–	–	–	–	–	–	–	–
Weymouth,	12,895	–	–	–	–	–	–	–	–	–	–	–	–	–
Watertown,	12,875	–	–	–	–	–	–	–	–	–	–	–	–	–
Southbridge,	12,592	–	–	–	–	–	–	–	–	–	–	–	–	–
Plymouth,	12,141	–	–	–	–	–	–	–	–	–	–	–	–	–
Webster,	11,509	–	–	–	–	–	–	–	–	–	–	–	–	–
Methuen,	11,448	–	–	–	–	–	–	–	–	–	–	–	–	–
Wakefield,	11,404	–	–	–	–	–	–	–	–	–	–	–	–	–
Arlington,	11,187	–	–	–	–	–	–	–	–	–	–	–	–	–
Greenfield,	10,427	–	–	–	–	–	–	–	–	–	–	–	–	–
Winthrop,	10,132	–	–	–	–	–	–	–	–	–	–	–	–	–
Total of reporting cities and towns of more than 10,000 population,	1,829,445	1	1	3	14	–	5	4	1	–	53	4	5	2
Saugus,	8,047	–	–	–	–	–	–	–	–	–	1	–	–	–
Stoneham,	7,090	–	–	–	–	–	–	–	–	–	2	–	–	–
Belmont,	5,542	–	–	–	–	–	–	–	–	–	–	1	–	–
Provincetown,	4,369	–	–	–	–	–	–	–	–	–	1	–	–	–
Total of reporting towns of less than 10,000 population,	25,048	–	–	–	–	–	–	–	–	–	4	1	–	–

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[1] Three nonresidents.

Week ending Dec. 26, 1914.

CITIES AND TOWNS.	Population. Census for 1910.	Anterior Poliomyelitis.	Cerebro-spinal Meningitis.	Chicken-pox.	Diphtheria.	Glanders.	Measles.	Scarlet Fever.	Septic Sore Throat.	Tetanus.	Tuberculosis, Pulmonary.	Tuberculosis, Other Forms.	Typhoid Fever.	Whooping Cough.
Boston,	686,092	–	–	–	5	1	2	1	–	–	19[1]	2	–	–
Worcester,	145,986	–	–	–	1	–	–	–	–	–	2	1	–	–
Fall River,	119,295	–	–	–	1	–	–	1	–	–	3	–	–	–
Lowell,	106,294	–	–	–	1	–	–	–	–	1	–	1	–	–
Cambridge,	104,839	–	–	–	2	–	–	–	–	–	4	–	–	–
New Bedford,	96,652	–	–	–	–	–	–	–	–	–	4	–	–	–
Lynn,	89,336	–	–	–	–	–	–	–	–	–	1	1	–	–
Springfield,	88,926	–	–	–	–	–	–	1	–	–	1	–	–	–
Lawrence,	85,892	–	–	–	–	–	–	–	–	–	–	–	–	–
Somerville,	77,236	–	–	–	1	–	–	–	–	–	4	–	–	–
Holyoke,	57,730	–	–	–	–	–	–	–	–	–	–	–	–	–
Brockton,	56,878	–	–	–	–	–	–	–	–	–	–	1	–	–
Malden,	44,404	–	–	–	–	–	–	–	–	–	1	–	–	–
Haverhill,	44,115	–	–	–	–	–	–	–	–	–	–	–	–	–
Salem,	43,697	–	–	–	–	–	–	–	–	–	–	–	–	–
Newton,	39,806	–	–	–	–	–	–	–	–	–	2	–	–	–
Fitchburg,	37,826	–	–	–	–	–	–	–	–	–	1	–	–	–
Taunton,	34,259	–	–	–	–	–	–	–	–	–	1	–	–	1
Everett,	33,484	–	–	–	–	–	–	–	–	–	1	–	–	–
Quincy,	32,642	–	–	–	–	–	–	–	–	–	–	–	–	–
Chelsea,	32,452	–	–	–	–	–	–	–	–	–	1	–	–	–
Pittsfield,	32,121	–	–	–	–	–	–	–	–	–	–	–	–	–
Waltham,	27,834	–	–	–	1	–	–	–	–	–	1	–	–	–
Brookline,	27,792	–	–	–	–	–	–	–	–	–	–	–	–	–
Chicopee,	25,401	–	–	–	2	–	–	–	–	–	–	–	–	–
Gloucester,	24,398	–	–	–	–	–	–	–	–	–	–	–	–	–
Medford,	23,150	–	–	–	–	–	–	–	–	–	1	–	–	–
North Adams,	22,019	–	–	–	–	–	–	–	–	–	–	–	–	–
Northampton,	19,431	–	–	–	–	–	–	–	–	–	–	–	–	–
Beverly,	18,650	–	–	–	–	–	–	–	–	–	–	–	–	–
Revere,	18,219	–	–	–	–	–	–	–	–	–	–	–	–	–
Leominster,	17,580	–	–	–	1	–	–	–	–	–	1	–	–	–

Attleborough,	16,215	–	–	–	–	–	–	–	–	–	–	–	–	–
Westfield,	16,044	–	–	–	–	–	–	–	–	–	–	–	–	–
Peabody,	15,721	–	–	–	–	–	–	–	–	–	–	–	–	–
Melrose,	15,715	–	–	–	–	–	–	–	–	–	–	–	–	–
Woburn,	15,308	–	–	–	–	–	–	–	–	–	1	–	–	–
Newburyport,	14,949	–	–	–	–	–	–	–	–	–	–	–	1	–
Gardner,	14,699	–	–	–	–	–	–	–	–	–	–	–	–	–
Marlborough,	14,579	–	–	–	–	–	–	–	–	–	–	–	–	–
Clinton,	13,075	–	–	–	–	–	–	–	–	–	–	–	–	–
Milford,	13,055	–	–	–	–	–	–	–	–	–	–	–	–	–
Adams,	13,026	–	–	–	–	–	–	–	–	–	–	–	–	–
Framingham,	12,948	–	–	–	–	–	–	–	–	–	–	–	–	–
Weymouth,	12,895	–	–	–	–	–	–	–	–	–	–	–	–	–
Watertown,	12,875	–	–	–	–	–	–	–	–	–	–	–	–	–
Southbridge,	12,592	–	–	–	–	–	–	–	–	–	–	–	–	–
Plymouth,	12,141	–	–	–	–	–	–	–	–	–	–	–	–	–
Webster,	11,509	–	–	–	–	–	–	–	–	–	–	–	–	–
Methuen,	11,448	–	–	–	–	–	–	–	–	–	–	–	–	–
Wakefield,	11,404	–	–	–	–	–	–	–	–	–	–	–	–	–
Arlington,	11,187	–	–	–	–	–	–	–	–	–	–	–	–	–
Greenfield,	10,427	–	–	–	–	–	–	–	–	–	–	–	–	–
Winthrop,	10,132	–	–	–	–	–	–	–	–	–	–	1	–	–
Total of reporting cities and towns of more than 10,000 population,	1,883,715	–	–	–	15	1	2	3	–	1	49	7	1	1
North Attleborough,	9,562	–	–	–	–	–	–	1	–	–	–	–	–	–
Winchester,	9,309	–	–	–	–	–	–	–	–	–	1	–	–	–
Total of reporting towns of less than 10,000 population,	18,871	–	–	–	–	–	–	1	–	–	1	–	–	–

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[1] One nonresident.

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